[DE]STABILIZING THE NEOLIBERAL FOOD REGIME: THE STRUGGLE FOR THE DEFENSE OF CORN IN MEXICO

BY

JOSE PERALTA

DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Sociology
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2012

Urbana, Illinois

Doctoral Committee:

Associate Professor Zsuzsa Gille, Chair
Associate Professor Assata Zerai
Associate Professor Behrooz Gharamari-Tabrizi
Associate Professor Rachel Schurman, University of Minnesota

Abstract

In 1994, the Mexican government started implementing the North American Free Trade Agreement in the context of a process of neoliberalization of its economy. This new framework demanded deep transformations on that country's forms of production, commercialization, and consumption of food. The transition however, required that Mexicans accept that new order as normal.

This is a multi-sited ethnography and multi-methods qualitative study that examines the on-going process of naturalization of the neoliberal food regime in Mexico and the attempts to destabilize it. I conducted participant observation, archival research, and in-depth interviews in the data collection. With a focus on corn, the most important Mexican food staple, this study examines five terrains of interactions in which the interests of the agro-food industrial complex are both advanced and contested. These terrains are: a) Oaxacan farmers' work in two communities and their participation in entrepreneurial workshops, b) Mexican journalists' participation in educational workshops provided by the biotech industry, c) the flourization of Mexican corn tortillas, d) graphic artists' responses to government funded advertisement campaigns aimed at promoting their agriculture policies, and e) the divide between food sovereignty activists. These are five disparate arenas of stabilization of the neoliberal food regime in Mexico, in which this study recognizes neoliberalization as a transformation happening through peoples' and institutions' practices. From this perspective, not applied by most studies of the globalization of food and agriculture, I demonstrate that the neoliberal capital needs to stabilize its material transformation of the Mexican food systems by also reconfiguring

peoples' ways of relating to each other, as well as ways of eating (corn), listening and writing (about industrial agricultural technologies), and remembering (the social history of corn and tortillas).

Acknowledgements

I would like to express my gratitude to the people and institutions that made it possible for me to complete my dissertation.

I am first thankful to my advisor Zsuzsa Gille. Her guidance and support were very important in shaping my studies and as I wrote my dissertation. I also want to thank professors Behrooz Ghamari-Tabrizi, Assata Zerai, and Rachel Schurman for their invaluable feedback on my dissertation. I am also thankful to the Department of Sociology, the Tinker Foundation, and the Center for Latin American and Caribbean Studies for providing me with funding to conduct my fieldwork and write my dissertation. Also, I thank the people in Mexico City and Oaxaca for their generosity in sharing with me their experience, knowledge, and friendship. They enabled me to learn what otherwise would have been impossible to figure out in the short time span of a year spent doing fieldwork.

I am also indebted to my parents Percy Peralta and Sonia Olaechea as well as to my brothers Percy and Juan José, who, from a distance, on the phone and skype, were always with me. I am thankful to my partner Leisa Kauffmann for her words of encouragement, helpful comments on my work, and love, especially at times when the writing process became harder. Finally, I am also indebted to my dog, Maga, who patiently sat next to me during the long hours of writing and who took me for walks every day.

Table of Contents

List of Acronyms

ADM	Archer Daniels Midland
AgroBIO Mexico	Agro Biotechnology Mexico
ANC	National Agreement for the Countryside
ANEC	National Association of Rural Commercialization Enterprises
APPO	Popular Assembly of Oaxacan People
BANAMEX	National Bank of Mexico
CAP	Permanent Agrarian Congress
CECCAM	Center for the Study of Rural Change in Mexico
CEDICAM	Center for Integral Campesino Development of the Mixteca
CENAMI	Center to Support Indigenous Missions
CNC	National Campesino Confederation
CNI	National Indian Congress
CONASUPO	National Company of Popular Substistence
EZLN	Zapatista Army of National Liberation
FAPATUX	Tuxtepec Paper Factory
GATT	General Agreement on Trades and Tariffs
GEA	Environmental Studies Group
GIMSA	MASECA Industrial Group
GRUMA	MASECA group
ICAPET	The Institute for training and Work Productivity

IFIC	International Food Information Council Foundation
MASECA	Aztec Milling Corporation
MECNM	Movement The Countryside Cannot Bear it Anymore Movement
MICONSA	CONASUPO's Industrialized Corn Inc.
MINSA	Industrialized Corn Corporation
NAFTA	North American Free Trade Agreement
ODRENASIJ	Organization for the Defense of the Natural Resources of the Sierra Juarez
PAN	National Action Party
PIPSA	Producer and Importer of Paper Inc.
PRD	Party of the Democratic Revolution
PRI	Institutional Revolutionary Party
PROCEDE	Program for Certification of Ejidal Lands
PROFECO	Federal Attorney's Office of Consumer
PROMAF	Program of Corn and Beans
RDM	Network in Defense of Corn
SAGARPA	Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food
SEDER	Secretariat of Rural Development
SEMARNAT	Secretariat of Environmental Natural Resources
SMNP	Without Corn There is No Country Campaign
UAM	Metropolitan Autonomous University
UCCS	Union of Socially Concerned Scientists

UNAM	National Autonomous University of Mexico
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNORCA	National Union of Autonomous Regional Peasant Organizations
UNOSJO	Union of Organizations of the Sierra Juarez of Oaxaca

Introduction

1. Problem statement

During the 1990s, the Mexican government signed the North American Free Trade Agreement, dismantled the national system of food staple redistribution (CONASUPO), and declared a constitutional amendment to allow the privatization of communal land. Those changes were part of a major transformation in Mexican food systems toward a neoliberal regime that promoted the expansion of the agro-food industrial complex while discouraging small-scale agriculture and traditional forms of producing and consuming food in Mexico. In the countryside, the State's agricultural technicians and microfinance NGOs promoted the substitution of traditional corn agriculture with products with comparative advantages in the national and global markets. This context has turned the arrival of GMO corn to Mexico--first through unintended "contamination" and later through permissive legislation—a paradigmatic case of an immediate threat to Mexican food sovereignty, against which diverse citizen groups united.

My research examines the forms by which the transition to a neoliberal food regime is being normalized by the intervention of corporate and state actors. In addition to developing entrepreneurial skills among farmers, these actors require transformations in food production, in the forms of communication about such agrarian changes, as well as in the forms food is eaten, and remembered. I will analyze responses to these transformations by studying the struggles around stabilizing neoliberalism in Mexico through an analysis of five scenarios with a focus on corn production and consumption:

the experience of farmers from the Sierra Juarez of Oaxaca, journalists attending to training workshops organized by the biotechnology companies, the flourization of tortillas, the resistance of Mexican graphic artists to government and corporate ad campaigns, and the difficulties of food sovereignty activists in forming coalitions.

In 2001, after the discovery of GMO contamination of corn in Oaxacan milpas, different Mexican NGOs, indigenous coalitions, and farmers' organizations came together to confront the introduction of GMOs in Mexican cornfields and the impacts of NAFTA[1]. The responses of these activists highlighted GMO contamination and its connections to NAFTA as a threat to the historical center of the origin of corn and to the epicenter of the world's corn diversity. Due to the Mexican tradition of adaptation to and domestication of corn from pre-Hispanic times to the present, GMOs in Mexican milpas[2] were also recognized as a wound to the "people of corn."

While most responses to GMO contamination in Mexico were approached in the context of a critique of NAFTA, other previous international agreements assumed by the Mexican government had already had a deep impact on Mexican farmers' economy and social life. In 1982, the external debt crisis in Mexico gave the government the justification it needed for proposing and implementing policies that reduced the role of the state in the internal markets and promoted foreign investment. In 1986, Mexico's entrance into the General Agreement of Tariffs and Trade (GATT) accelerated the negative impact of the neoliberal policies on small and medium scale farmers (Wise et. al

[1] GMO contamination was found in 32 samples of Mexican corn in 18 communities in the Valles Centrales and Sierra Juarez of Oaxaca, the Sierra Norte of Puebla, San Luis Potosi, SierraTarahumara of Chihuahua, Tuxtlas Veracruz, Tlaxcala, Morelos and Estado de Mexico (CECCAM 2003). These lands and their communities are not contiguous but spread throughout Mexican territory. In all these regions, a Starlink variety of GMO banned by the US Environmental Protection Agency (EPA) for human consumption was found (CECCAM 2003).

[2] Milpas are the Mexican cornfields characterized by pluriculture of corn, beans, and squash in the more traditional way. They are also the axis of economic and social life in the Mexican countryside.

2003). Between 1984 and 1996 the population living in poverty dramatically increased from 59% to 80% and almost half of those were living in conditions of extreme poverty by 1996 (Alcalde et al. 2000).

In 1994, NAFTA consolidated an arena in which two of the most well-off countries of the world would play as equal partners with Mexico, a country with one of the higher Gross National Products in Latin America but with a deep gap in the distribution of income among its population. The rules of NAFTA were designed to facilitate foreign investment, liberalize trade, and reduce the regulatory intervention of the states (Wise et. al 2003).

The dialogue the Mexican president Carlos Salinas de Gortari and George Bush, president of the United States, started in the early nineties, before the formation of NAFTA, was framed by the Mexican government as the beginning of an era that would put Mexico on the map of developed countries. This free trade agreement was presented as an opportunity for Mexico to benefit from its comparative advantages in a rich market of North American consumers and to initiate a sustained economic growth. The economic integration to the North would inspire Mexican industries to catch up with the high environmental standards of those of the first world. The consequent economic growth spurred by NAFTA was expected to promote "investment in ecological improvements … [and] international competition would stimulate economies of scale [to] avoid the pollution of small dirty industries" (Wise et. al. 2003).

However, a decade after the first commitments of NAFTA were assumed, the richest 10% of the Mexican population receives 42% of the total national income while the poorest 40% receives 11% (Wise et al 2003). At the same time, the front page of

recent news says that Carlos Slim,- the Mexican model of the successful entrepreneur in the times of neoliberal markets- is the richest man in the world, ahead of Bill Gates and Warren Buffet (La Jornada 2012). In the milpas, the increase in corn imports within the NAFTA regime made Mexican corn lose 27% of its monetary value since 1994. The roll back of governmental support to the rural sector left small-scale farmers in particular exposed to the international market. During the decade after NAFTA was signed, food dependency grew 50% with a food deficit of 10.4 million tons (Rubio 2001). The limited access of small-scale farmers to markets with fair prices promoted abandonment of the milpas by younger generations and the consequent decrease of the traditional production of corn. This migration of the labor force from the rural areas of the Mexican South to cities, more industrialized Mexican regions and to the United States is one of the reasons for the loss of genetic diversity of corn (McAfee 2003, Fitting 2006, 2011). The abandonment of milpas meant the reduction of *in situ* labs of traditional experimentation and reservoir of maize germplasm.

This context has motivated scholars, activists, and scholar activists to discuss the impact of the Mexican neoliberal turn on the world reservoir of genetic diversity of corn and the loss of food sovereignty. The discovery of GMO contamination of native corn in Oaxaca in 2001 fueled discussions from different perspectives regarding the effects of contamination on the material and symbolic values of corn and its connections to the implementation of NAFTA.

By 1999, Mexican scholars had already started discussions about the possible effects of the introduction of GMOs in Mexican markets and the implications of the contamination of Mexican corn. According to Lizzette Donath, they questioned: “What

new relations would be generated between 26 million Mexican poor, predominantly indigenous, people, and the induction to transgenic consumption via globalization? How would the incorporation of biotechnology in agriculture impose transformations in habits, diet, and customary practices?" (2000, p.43). These discussions and, afterward, pressure on the government allowed these activists and scholars to obtain a moratorium for GMO planting that provided a limited level of protection to Mexican varieties of corn.

McAfee explains that the problems of GMO contamination not only lay in the possibility of endangering the gene pool of Mexican maize but also in the consequent transformations of agricultural production systems (2003). This contamination in "GMO-free" countries would have the effect of reducing non-GMO options in agricultural international trade and promoting the full adoption of GE crops and consumption in countries that currently ban them. African countries' resistance to accepting GM food aid from the United States, for example, represented an attempt to protect their access to markets of food in Europe, which has higher standards regarding the consumption of GMO-free products[3] (Pasternak 2005, McAfee 2003). However, as Clapp (2006) explains, the case of these African countries differs from the Mexican scenario in that trade interests and environmental concerns about biosafety did not converge there as they did in Southern and Central African countries. The divergence in interests and concerns regarding GMO introduction in Mexico is evident in the weak governmental responses to that contamination in Mexican agriculture.

[3] Pasternak (2005) explains, however, that resistance was promoted by these countries' bourgeoisie, which directly benefits from the agro-business in European markets. Nevertheless, that segment of the population would probably allege that it was more informed about the consequences of GMO contamination than small-scale farmers and potential beneficiaries of the offered food aid.

In Mexico, a complete acceptance of GE crops, as attempted by the Mexican government agents and officials in late 2002 after contamination was well known (Clapp 2006, Herrera 2004)[4], "would accelerate current trends toward greater industrialization and external input dependency in farming" (McAfee 2003. p.20). According to McAfee, these changes in turn "would strengthen the competitive advantage of the United States in Latin American and world food and fiber markets and would speed the incorporation of Latin American food systems into a global agro-food complex dominated by a small number of powerful conglomerates" (2003. p.20). Mexican farmers' abilities and opportunities to maintain the in-situ repositories of corn germplasm would be impacted, pushing them to change their agricultural practices and seeds.

Fitting (2006, 2011) explains that the impact of NAFTA in the loss of genetic diversity of corn started even before GMO contamination, since the impoverishment of farmers forced them to abandon their milpas. Migration of youth to the North (cities, industrialized rural areas, or USA) not only left the milpa without an important part of the expected family's labor force but also led to the loss of traditional knowledge needed to maintain the milpas. Fitting calls this context of policies that prioritizes market liberalization, trade and agriculture efficiency over supporting Mexican farmers' domestic production in the milpas the "neoliberal corn regime" (2006). From Fitting's perspective, biosafety policies are insufficient if there is not support for landraces farmers who maintain maize genetic diversity *in situ*. In this sense, the convergence of biosafety concerns and trade interests discussed by Clapp to attract a strong governmental response in defense of genetic diversity would still be insufficient without an interest for

[4] Representatives of the Mexican government worked toward removing the bans on the cultivation of GM corn in 2002, deciding/arguing that since genetic flow has already occurred, Mexico should take advantage of the situation and benefit from it (Clapp 2006, Herrera 2004).

improving the living conditions of farmers. Otherwise, as Benito Ramirez (a farmer from Guelatao, Oaxaca) explained to me, farmers will keep stopping planting corn as he did because: *"Nadie compra, no hay mozos, no hay yunta ni pasturas."* -Nobody buys [our production], there are no young people to work, there are no animals to till the soil and no pastures to feed them.

Otero and Pechlaner (2010) recognize in that context a menace not experienced by populations of countries of the global North also planting GE crops. The situation of food vulnerability in Mexico and the consequent effects on farmers' survival represents, they explain, a reason to generate resistance that will challenge what, following McMichael, they call the "neoliberal food regime"[5]. They write, "[We] hypothesize that the globalization of agriculture and food will be tempered not only by the differential interests and abilities of individual nation-states but also by the resistances to neoregulation[6] that arise within them" (2010, p.182). McMichael, however, observes that the configuration of power relations in the current food regime operates through the accommodation of disparate forces, including the resistance from the grassroots. In that sense, that resistance is also constitutive of the food regime since "counter-movements express the material and discursive conditions that the corporate agents actively seek to appropriate" (2000, p.28). He adds that social movements also constitute the corporate

[5] They build on McMichael's concept of "food regime" (1992), however, they note that their interest in people's agency as well as in the role of the state and corporate actors differs from McMichael's macro perspective since they apply their analysis on a national scale with more empirical bases (Otero and Pechlaner 2010). For McMichael, the "corporate food regime" is that same [third] regime. Otero and Pechlaner focus more on the role of the state in its institutionalization.

[6] I use the term "[de]regulation" for the same concept that refers to the state regulatory intervention not only to ease the transition to but to maintain an imagined deregulated [global] market, which is, as McMichael (2004) "a political construct in which exchanges between unequal societies and/or incommensurable cultures privilege powerful states and institutions" (2004, p.138). I prefer "[de]regulation" instead of "neoregulation" because I want to highlight the contradictory appearance of a regime of ruling that presents (and must always be present) itself as enforcing a non-ruling scenario for the sake of an alleged freedom of the market.

food regime, "through resistances: both protective (e.g., environmentalism) and proactive, where 'food sovereignty'[7] posits an alternative global moral economy" (2005, p.290).

My research examines the on-going processes of normalization of the neoliberal food regime and the attempts to destabilize it in the context of the struggles for the defense of food sovereignty in Mexico. I analyze five arenas in which this regime is being materialized. I particularly examine people's and institutions' practices that make that new regime come into existence with special attention to what Fitting called the neoliberal corn regime. However, my focus on five disparate but interconnected terrains of [de]stabilization contributes a different dimension to the understanding of that regime at work. Moreover, arenas I examine in this study, such as the educational opportunities for journalists learning to write about biotechnology, contribute to Kinchy's study of the scientization of agricultural biotechnology debate in Mexico (2007) that I discuss below. My approach is important because it exposes the process of neoliberalization as a transformation that happens in the material practices subjects perform. Different from other scholars that consider neoliberalism in agriculture as a given, my study recognizes it as a strategy that becomes material and subsists through the practices that give it its shape and resilience.

I find Bourdieu's theory of practice (1977) useful to study actors' roles in the relatively [un]stable condition of neoliberalism in Mexico. As Bourdieu explains, his

---

[7] According to McMichael, the food sovereignty approach emerges in response to the 'historic rupture' brought about by the expansion of the development project that not only displaced rural workers to urban centers but also "displac[ed] biodiversity, customary forms of knowledge and moral economy" (2005, p.280) The response of food sovereignty targets the productivist paradigm of the development project that operationalizes food security in "quantitative/monetized terms of market transactions" (McMichael 2005, p.280) Via Campesina defines food sovereignty as "the right of peoples to healthy and culturally appropriate food produced through sustainable methods and their right to define their own food and agriculture systems" (2011).

approach goes beyond the knowledge that establishes and exposes "the structures of the social world and the objective truth of primary experience (…) by posing the question of the (…) conditions which make such knowledge possible" (1979, p.3-4). In that inquiry, Bourdieu points out that the knowledge and the world made with it are constructs of social practices. His theory of practice rejects structuralism by questioning the assumption of stable social structures determining peoples' actions. While Bourdieu's work takes into account the fact that broader structures have an influence on peoples' actions, he focuses on ways in which those constructs are also built from their acts. In that sense the social world, its structures and agents are constituted by subjects' practices. In these practices, according to Bourdieu, subjects embody 'habitus,' the internalized dispositions learned through the multiple processes of socialization (by explicit teaching and/or practice) along subjects' lives.

Borrowing that approach from Bourdieu, I analyze practices that not only *bring into life* neoliberalism (from the bottom-up), but also give material existence to forces resisting its normalization. Studies that consider neoliberalism as a self-evident, stable structure in Mexico fail to recognize the role of everyday practices -including scholarly work (even if it examines the conditions that enabled the formation of that structure in the first place)- in its maintenance. From a Gramscian perspective, the stabilization of that neoliberal assemblage could be read as a move to turn it into a taken for granted set of meanings, values and beliefs. However, these meanings, values and beliefs, only become real in Mexico through subjects' material practices, embodying and constituting a particular sense of reality. Williams' remarks on the concept of hegemony are useful to

understand the role of performance in that process.[8] According to Williams, the concept of hegemony expresses the "relation of domination and subordination, in their forms as practical consciousness, as in effect a saturation of the whole process of living (…) a whole body of practices and expectations over the whole of living: our senses and assignments of energy, our shaping perceptions of ourselves and our world" (Williams 1977, p.110). In that sense, the neoliberal food regime could be seen as a process that is never complete but that operates in permanent struggle (and expects to succeed) in the realm of our practices and senses, flavors, textures, emotions and imaginations, through the articulation of disparate forces, even of those intended to oppose it.

The particular *nature* of agriculture, as it has been recognized early on by Kautsky (1988), imposes non-human conditions *opposing* the full industrialization of food production. The seasonality of crops, adaptability of seeds to particular soil conditions, grains' resistance to freeing their nutrients (as in the case of corn requiring a properly done nixtamalization to reach its proteins), insects evolving to resist pesticides in the cornfields are only a few examples in which the material world itself actively participates in the [de]stabilization of the neoliberal food regime. Activists, farmers, scientists, cooks, journalists, tortilla makers, graphic artists, consumers, all engage in that world with practices that influence the ways in which they read it, taste it, digest it, make a living of it, and ultimately impact the extent to which they can control their food systems. As I discuss below in my literature review, scholars have examined industrial attempts to tame nature in order to bring into a factory-like, controlled environment the production of plants such as corn. Transgenes are, for example, an outcome of such technological

[8] However, contrary to Bourdieu, Gramsci as well as Williams recognize consciousness in those actions instead the unconscious operation of the habitus in the reproduction of ruling class values.

attempts to harness *nature,* which rendered corn a site of intense mobilization and resistance in Mexico.

2. Literature Review

2.1 Globalization of food and agriculture

This study pays attention to scholarship that examines the implications of the last decades' transformations in industrialization and commercialization of food and agricultural systems in the world[9]. That scholarship is useful to understand the struggles against the lost of food sovereignty in Mexico. A main area of inquiry of this literature is the implications of expanding and deferring the steering of food production and consumption relations to transnational corporations (McMichael 2000, 2004; Bonanno et al. 1994, Heffernan and Constance 1994). The impact of the transnational industrialization of food and agriculture in the new international division of labor (Bonanno et al. 1994, Friedman 1981), its dynamics with symbolic and material *nature* (Goodman and Redclift 1991; Goodman and Watts1994, 1997; Whatmore 1994; Boyd, et al. 2001) and their effect on increasing global inequality and exclusion of subnational spaces (Schaeffer 1995, Bonanno et al. 1994) are also main concerns discussed by this literature. McMichael locates these transnational socio-economic transformations studied by this literature as an outcome of the crisis of a development agenda equated to the industrialization of nation-states but enlarged to a global scale. He also points out agency in the emergence of other outcomes of the development crisis such as alternative

[9] Most of these scholars consider Kautsky's early analysis of the proletarianization of the peasantry and industrialization of agriculture in the "Agrarian Question" (1988/orig.1899) to be an antecedent of this scholarship.

food/agriculture and resistance movements (McMichael 2000) -that represent alternative projects of globalization- discussed by scholars interested in globalization of food. My research considers, as he does, that neoliberal globalization and alternative visions of the global as projects instead of just a set of policies, However, I argue that they are projects that come through life through everyday practices that constitute subjects and institutions.

Alternative "non-standard food production/consumption practices" are discussed by some to be a moralized move back to *nature* (Murdoch and Miele 1999 p.466-467) and a *naturalization* of practices such as organic farming without substantive transformations in the working conditions of farmers (Guthman 2004). This literature on resistance to globalization of food, mostly from a political economy perspective focuses primarily in a consumption based politics including unorganized resistance based on reflexive consumption (DuPuis 2000). Other scholars interested in globalization of food focus on the reconfigurations of culture and meanings embedded in new agriculture and food/taste/diet regimes (Plotnicov and Scaglion 1999; Weismantel and Mintz 1999; Lind and Barham 2004; Mintz 1985; Cook 1994). Goodman and DuPuis (2002) also identify the beginning of a "consumption turn" with a cultural focus[10]. According to Goodman and DuPuis, three cultural Marxist perspectives, "the new times," "material culture," and "standpoint feminism," often disregarded by scholars working on agro-food studies, are relevant in this field since they can "provide useful links between the culture/identity

[10] For Goodman and DuPois (2002) this focus on consumption has a broader spectrum that includes from Ritzer's (2000) *McDonalization of Society* to Bordo's (1993) *Unbearable Weight*, a study of anorexia nervosa.

studies of consumption and the more production-centered focus of commodity studies" (2002, p.12). "The New Times" analyses of the Birmingham school founded by Stuart Hall and others, discusses global capitalism and the connections between new configurations of the forces of production and social interaction in which agro-food scholars not only can identify consumption of food and the emergence of identities as an arena of agency (Goodman and DuPuis 2002) but also question new forms of social control through difference. From the "material culture" approach led by Arjun Appadurai (1986) and Daniel Miller (1995), production and consumption are not considered distinct arenas of struggle whereas social relationships of consumers and producers are constitutive of each other (Goodman and DuPuis 2002). In the same way, from this perspective, "market and non market activities are continually embedded within each other, rather than being contained in separate spheres" (Goodman and DuPois 2002, p.13). According to Goodman and DuPuis (2002) "standpoint feminism" can bring into the analysis of the changes produced by the restructuring of the agro-food systems not only an understanding of social relationships beyond the effect of commodity-fetishism and the rationality of the market but also an understanding of politics as domination in the realm of the market or governance and also as individuals' "capacity to act" (Baker 1990).

"The New Times" analysis provides critical thinking tools to examine responses to the neoliberal globalization of the tortilla in Mexico. The appeal to the history and traditional flavors made by producers of delicatessen tortillas (found in restaurants such as Itantoni, which I discuss in Chapter 3) illustrates the use of identity as a terrain of agency in the struggle for regaining control over Mexican food systems. That means of resistance, however, turns difference (expressed in fetishized tradition for the market)

into another avenue for the stabilization of neoliberal globalization. This global market, as Stuart Hall (1991) would explain, works through the articulation of difference; it actually does not silence alternative histories and voices but brings them together to speak through the same language. Wilk sees in this articulation a "structure of common difference:" a hegemony of forms (but not contents) in which the global operates by "asserting distinctiveness" (1995). Difference/identity in the terrain of food consumption, however, as Hall, Tsing, and Wilk would agree, can also be a location of political action. This is the sense in which Hall talks about the politics of the local. The Gramscian war of position is for Hall the battle for mobilizing identities in order to construct a different (or reproduce the same) historical project (1991). Difference (expressed in ethnic identities, alternative imaginations of the global, etc.) is that unstable positionality that can become a site of resistance. Nevertheless, as I discuss in my chapter three, it is also articulable to tame opposition and involve it in hegemonic projects.

Bunin's (2001) research of Indian and Californian organic cotton systems and Whatmore's and Thorne's (1997) study of fair trade are also examples of the consumption turn with a cultural focus (Goodman and DuPuis 2002), however they don't fully unpack the transnational dimensions of the food and agriculture systems they discuss. In a different way, Gille (2006) brings together cultural studies with literature on neoliberal governmentality to find in food itself a site for the production of [Euro]globalization. Her approach to governmentality as a cultural product and performance explains the ways in which the standardization of paprika to access the European Union carves the channels and constitute the flows through which globalization is shaped. Different to Bunin's (2001) approach to standards as excluding or including

farmers in the process of globalization, Gille, in addition, sees them shaping globalization and enabling forms of governing through the regulation of products. In my research, I pay similar attention to performances in the attempts to make the neoliberal food regime acceptable, materially and culturally. I argue, however, that the [de]stabilization of that regime, in addition to relying also on flexible accumulation[11], relies on the performances of what Tsing calls "spectacular accumulation", the calling up of dreams for the "specul[ation] on a product that might or might not exist" (p.75, 2005). Those performances are aimed at inviting peoples' commitments to engage or accept practices that turn new regimes of food production and consumption in Mexico into a material reality. The transition from the consumption of tortillas made with fresh nixtamal to an industrial tortilla made with flour, as I demonstrate in my study, makes use of such performances. My research thus contributes to this literature engaging in the culturally focused consumption turn by highlighting the role of consumption [of food] as a cultural and material practice that gives form to particular configurations of the global. Interventions to transform for example, consumers' preference for tortillas' taste and texture, are also attempts to stabilize specific constellations of global interconnections. My research also pays attention to studies that theorize the ways in which capital tries to overcome the obstacles that restrain it from penetrating agriculture: *natural* (Goodman et

[11] I borrow this concept from Harvey to refer to the post-fordist process of flexibilization of "labour processes, labour markets, products, and patterns of consumption (…) characterized by the emergence of entirely new sectors of production, new ways of providing financial services, new markets, and, above all, greatly intensified rates of commercial, technological, and organizational innovation" (Harvey 1989, p.147). I observe, for example, that flexibilization of products in the transformation of the tortilla (which also undergoes an important reshaping of the chain of production and distribution) and the efforts to change consumers' tastes for the ultimate goal of capital accumulation. The actual material flexibility of flour replacing masa nixtamal mirrors and play into this process. My attention to subjects' practices however, adds what Ong points out as missing in Harvey's account of the operation of late capitalism: "human agency and its production and negotiation of cultural meanings within the normative milieus of late capitalism" (p.3, 1999).

al 1987, Goodman and Redclift 1991, Goodman and Watts 1997, Whatmore 1994, Boyd et al. 2001) and social (such as the family-labor farms) (Kloppenburg 1988) limitations affecting the production process of the modern agro-food industry (Murdoch and Miele 1999). In the context of the study of the political economy of globalization and standarization of agriculture, that scholarship for example, classifies the attempts of the food industry to fully tame natural production processes as: a) *appropriationism*: industry strategies that undermine "discrete elements of the agricultural production process" (Goodman et al. 1987, p.2) and supplant them with industrial activities, and b) *substitutionism*: already industrialized agricultural product increasingly suffers "replacement by non-agricultural components" (Goodman et al. 1987, p.2). According to Kloppenburg (1988), the "process of differentiation" through which certain elements of production are replaced by industrial activities off of the farm is key in the indirect extraction of surplus value not only from the labor of the farmer but also from the workers of the industries that provide the inputs and machineries to the agro-industry.

In order to highlight the industrialization of biophysical systems in the era of globalization of agriculture and food, Boyd et al. (2001) differentiate between *formal* and *real* subsumption of nature. Under the former, industries "confront nature as an exogenous set of material properties and bio-/geographical processes, but are unable to directly augment natural processes and use them for increasing productivity" (p.557) while the latter represents the cases in which capital is able to "take hold of and transform natural production, and use it as a source of productivity increase" (p.557). From their perspective, science and capital not only have achieved the means to replace natural processes that affect the agro-food industry production chain, but have penetrated

immanent processes of biological systems, remaking *nature* to work "as actual forces of production (p.565), […] harder, faster, and better" (Boyd et al. 2001, p.564). The introduction of GMO corn in Mexico represents an example of what Kloppenburg observed to be the efforts to transform biological systems into a "vehicle for accumulation" since capital not only modifies *nature* for increasing production but also circulates through it (1988). These studies expose ways in which globalization is unfolded as a project that operates even at microscopic scales to achieve new dimensions of control over world food production systems and consumption.

2.2 Post-colonial natures and the appropriation of indigenous knowledge's

My study exposes a face of the operation of neoliberalism in Mexico where indigenous knowledge is appropriated in the industrialization of corn and tortilla production.
I point out this appropriation works as a two fold process: while subjects are discouraged in multiple ways from continuing their productive practices (such as legislation that ease the dismembering of communal land or direct technological assistance that promotes the adoption of new productive practices) - their food and knowledge regarding agriculture and food production is recuperated in the form of highly industrialized products and luxury consumption.

Environmental historians remind us that in addition to science, indigenous knowledges were also instrumental in shaping the imaginative symbolism that was utilized for colonizing local populations (Grove 1995, Anderson 2003). These scholars, however, fail to recognize the ways in which these indigenous knowledges were also taken apart and imagined by the colonizer in the fulfillment of imperial endeavors. They refer not to non-western systems of knowledges themselves but to isolated, experiential,

indigenous knowledges collected and translated by earlier naturalists. While indigenous knowledge has been used for example by conservation and sustainable development experts, they have framed environmental problems as struggles emerging from population growth and local ignorance of the good of conservation. According to Newmann, this approach increases the conflicts over land use and the contradictions between the state policies and local moral economies (Neumann 1998). Newmann also suggests that local empowerment through participation in the agenda of conservation and sustainable development is a device to expand greater state surveillance and control of land resources from below. Other scholars' critiques point out different contradictions of participative development.

In Mexico, indigenous knowledge of tortilla preparation, as Pilcher (1998) explains was early appropriated but gained wide acceptance among urban consumers in the second half of the twentieth century, a time of increasing attempts to industrialize it. The introduction of intensive agro-industrial practices in the production of corn in Mexico occurred in a political and economic context that promoted indigenous people's abandoning their lands and productive practices. I discuss in my study, that appropriation of corn and tortilla knowledge in Mexico, works as a two fold process: while subjects are discouraged in multiple ways from continuing their productive practices (such as legislation that ease the dismembering of communal land or direct technological assistance that promotes the adoption of new productive practices) - their food and knowledge regarding agriculture and food production is recuperated in the form of highly industrialized products and luxury consumption.

I also highlight the scientization[12] of the GMO corn controversy not only as a form of excluding indigenous and small-scale farmers from participating in policy making regarding food and agriculture (Kinchy 2007), but also as a form in which epistemic violence is inflicted on them. Briggs and Sharp (2004) use Spivak's concept of epistemic violence to refer to the condition of the participation of subaltern voices: even if invited, they have to be articulated in the language and rhythms of western paradigms. The subaltern is "never truly expressing herself but always already interpreted"[13] (Briggs & Sharp 2004, p.664) because scientific language is the only means to give credibility to subaltern knowledge (Pretty 1994, Hayden 2003). As I discuss in my second chapter, the intervention of the agro-food industrial complex in the education of journalists on biotechnology is a means to force activists (including indigenous organizations) concerned about the introduction of GMO in the Mexican countryside to express their claims with the language of "sound science" in order to gain media attention. The complex relationships that connect indigenous knowledges within the production of western science and the market "produc[es], invok[es] and giv[es] shape to (…) subjects, objects and interests." (Hayden 2003, p.6)

According to Hayden, western ethnobotanists and ethnobiologists, for example, think of their professional role as that of a "chroniclers" and "translators" (Hayden 2003, p.31) of indigenous knowledges in different ways. Translations work to "demonstrate their scientific veracity, rationality, efficacy, or (more recently) sustainability" (p.31).

---

[12] Kinchy explains that the scientization of politics in Mexico "creates barriers for the participation [of citizens in policymaking] restricting access to political processes to experts" (2011).

[13] Nevertheless, indigenous people have also used the representations, symbols and western translations of their traditional knowledge of nature to reclaim rights over their resources. For example, discourses of "closeness to nature" have been appropriated by indigenous groups to demand recognition of their expertise in ancestral *conservation* practices.

This translation allows for an "epistemological advocacy" (Hayden 2003) of indigenous knowledges based on arguments of them as "essentially scientific" (Hunn 199 p.11, cited by Hayden 2003) but also provides elements to think of an underlying common rationality between western and non-western ways of knowing nature (Hayden 2003). However, veracity and validity of indigenous knowledges (such is the case of tortilla preparations) also depends on the success of rendered knowledges in the arena of commercialization (Hayden 2003).

According to Brosius (2000) even environmental activists working for the defense of indigenous rights to their lands frame indigenous knowledge to fit causes appealing to the public and media. In many cases such defense contradictorily implies its exotization and its translation to the language of conservation (Brosius 2000). Nevertheless, the western "notion of IK [World Bank's acronym for indigenous knowledge] is also used politically by local villagers and non-governmental organizations (NGO) working with them to naturalize and legitimize their claims" (Baviskar 2000, p.101) to resources in areas selected for conservation of nature. Goss (1996) also points out that a real engagement of scientists with non-western knowledge would require an unappealing de-centering of expertise. For that reason, usually, participation in conservation is set to never challenge naturalists' projects. Moreover, as Briggs and Sharp explain, approaches that consider the inclusion of indigenous voices in western projects as an unproblematic addition of a variety of knowledges are politically naïve since they don't consider the power relations "which ensure that never can all knowledges sit equally together." (p.666, 2004). As hooks explains, western academia is interested in subaltern knowledge as a source of experiences instead of wisdom (1990). Alternative means of theorizing and

making sense of nature are discarded within scientific paradigms. As I observe in my study, scholars, as well as activists that delegitimize subaltern claims (such as malformation in corn as contamination) for not being substantiated in the terms of science fail to recognize their own participation in the stabilization of the neoliberal food regime.

3. Chapter Summary

Chapter one presents the forms in which farmers in the Sierra Juarez make sense of technologies of productivity improvement brought to that region by state and NGO officials. Although those technologies are oriented to developing farming practices that respond to the demands of the market, not only local but also regional and global, they also imply the disciplining of farmers' ways of being, thinking, and interacting within their communities (such as to start thinking of their neighbors as potential customers). The ultimate goal of expanding the reach of their markets is championed by experts as a form of maturity certified by access to micro-credits. During training workshops, traditional practices are subtly portrayed as non-lucrative, time-consuming, and backward, while the imported new technologies are presented as promising a means of life improvement. Farmers, however, don't take that information at face value, and while some take the chance of benefiting from credits and new technologies, they question the extent to which transformations suggested by experts would impact even more the fabric of their community.

Chapter two examines the experience of journalists attending workshops organized by the agro biotechnology industry to educate them on science and thus on the appropriate ways of listening to, writing on, and informing their audience about

agricultural biotechnologies in the media. While journalists realize these activities aim at the promotion of the agro-food industry interests, their reliance on their codes of professionalism (such as a search for objectivity by collecting and providing *both sides* of the story) is supposed to prevent them from producing *biased* reports. That professionalism, however, operates as a regime of truth that ultimately serves the transmission of the agro-food industrial complex messages to Mexico. The reproduction of success stories in the press, like the workshops on entrepreneurialism in the Sierra Juarez, aim to attract peoples' commitments to the practices that make neoliberalism possible.

Chapter three analyzes the normalization of the transition from nixtamal dough tortillas to tortillas made with flour. This transition is a material and symbolic expression of the shift to a neoliberal regime of food and agriculture. I argue that the tortilla industry conducts that move with strategies of persuasion required to change citizens' eating habits and their forms of remembering the history of corn and tortilla in Mexico. The state actively supports that change since the possibility of producing tortilla out of powder instead of fresh corn dough is portrayed as embodying the efficiency and flexibility aspired to in the new food regime. I argue that responses to that transformation in the realm of gourmet cuisine, specifically the transformation of traditional tortillas into a delicatessen, in turn legitimize the position of the industrial-made tortilla as the peoples' food staple.

In chapter four I argue that critiques to the spectacle of discourses and practices aimed at the stabilization of the neoliberal food regime in Mexico are also made through spectacle. I analyze the role of visual artists -editorial cartoonists and graphic artists- in

unpacking with their drawings and humor the contradictions between narratives of entrepreneurial success in Mexican agriculture and the crisis in the countryside. Their visual images have also been appropriated and reproduced by other groups engaged in social protests, however, in some cases they have become commodified as items that make of resistance itself a fashionable aspect of consumers' identity.

Chapter five examines the divide between the Without Corn there is no Country (SMNP) campaign and the Network in Defense of Corn (RDM), both coalitions of activists for the defense of food sovereignty and against the introduction of GMO corn in the Mexican countryside. I argue that their breach emerges from their different moral reasoning regarding collaboration with leaders and groups that have acted deceptively in the past, and the issue of scientifically un-sustained claims of connections between GMO contamination and the malformation of corn plants found in Oaxacan milpas. As members of the SMNP recognize, the impossibility of reconciling their differences and conflicts in order to form a common, broader, coalition creates a space for the advancement of the agro-food industrial complex in Mexico.

4. Significance

This study helps to understand ways in which neoliberal landscapes are produced in the context of the expansion of new agricultural technologies in the global South. My research, however, not only pays attention to the formation of interconnections (such as the relations between the biotech corporate world and journalists, or the flour tortilla industry and tortilleros) that give neoliberal dreams their effectiveness, but also to the forms in which alternative stories of the world are articulated through practices in the struggles for the defense of food sovereignty and against GMO corn. Those are material

struggles and conflicts over knowledge and meanings that imply peoples' adaptation to new economic, political and social arrangements.

The five terrains I examine are connected to and constitutive of the master narrative of global neoliberalism that celebrates the economic rationality of market entrepreneurs, competition, and individual gains as the path for the advancement of societies. By choosing five terrains of neoliberalization in Mexico, I portray and analyze in the micro-cosmos of each of them the disparate forces, connections, and imaginations at work in the reproduction, legitimation, and contestation of that vision of the world. Its promises of a trickle down of prosperity is part of what Tsing calls the "performative dramas" enacted to lure financial investors (and, as I argue, also to attract other citizens) into commitments to a particular view of the global[14] (Tsing 2005 p.58). The effectiveness of performances that make the neoliberal food regime hegemonic requires from citizens the acceptance and practice of imported technologies for the cultivation of the land and the self.

My research pays attention not only to the formation of interconnections that give neoliberal conjurings their effectiveness but also to the forms in which alternative stories of the world are articulated in the struggles for the defense of food sovereignty and resistance against the introduction of GMO corn. This approach offers insights into the "political work that gives dominance to neoliberalism" (Clarke 2004 p.30) and into how resistance to the recent transformations in Mexico exposes the fictional aspect of global neoliberalist stories and their "attempts to subordinate, dislocate or de-mobilize 'alternative modernities'" (Clarke 2004, p.30). In Mexico, the defense of the culture of

[14] Tsing calls "globalisms" to those commitment to the global (2005).

corn and milpa as the axis of life in the aftermath of GMO contamination appears to be a series of attempts to mobilize an imaginary that confronts those neoliberal fictions in which the public realm as a collective body is dissolved to produce the public as the terrain of the market ("the market of the private" – Clarke 2004).[15] By knowing the arrangement of articulations and reasons for failure or success in their production and their (de)stabilizing effects, it might be possible to propose alternative stories and articulations to carve out different landscapes. My attention to the way the agro-industrial food complex and the state have also put into practice mechanisms to influence/control the representation of corn and agricultural technologies exposes the means for the production of those stories.

My study brings together in dialogue the literature on globalization of food and agriculture and post-colonial natures in order to understand the process of normalization of the neoliberal food system in Mexico. It also helps to understand, from the window opened by the struggles over the food systems in Mexico, ways in which the neoliberal vision of the world is reified.

[15] Clarke's view of neoliberalism as a strategy not only enables us to explore what he calls "the gaps between ambition and achievement" instead of taking neoliberal worldview for granted (Clarke 2004, p.30) but also suggests us the potential of finding the articulations that assemble neoliberalism as a project and and alternative strategies as means of effective resistance.

Figure

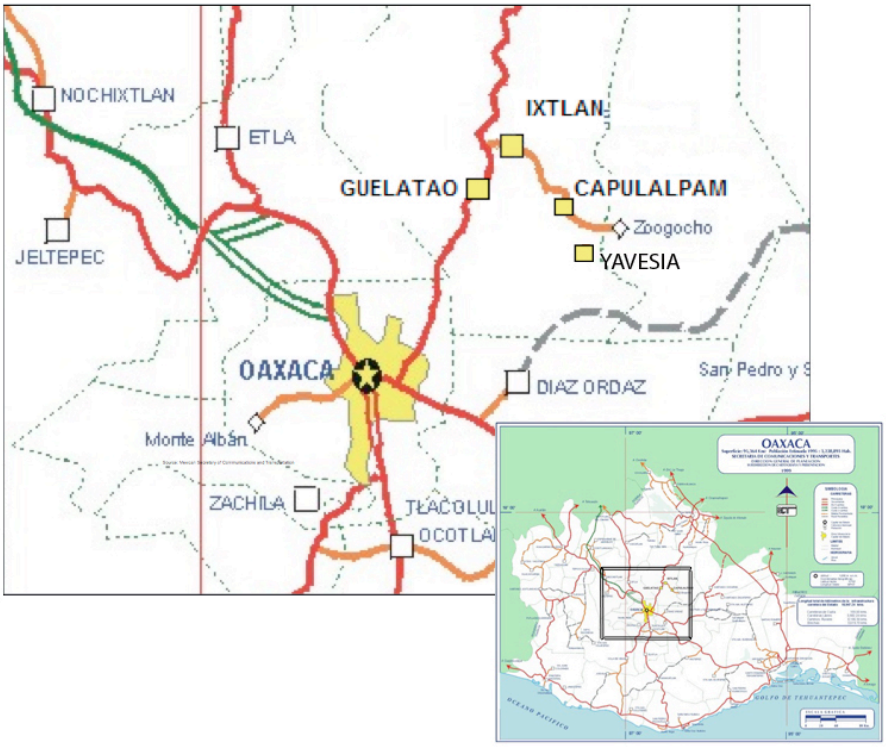

Figure 1. Map of the fieldwork sites in the State of Oaxaca

Chapter One
Farming Corn, Facing the Entrepreneurial Challenge

The Sierra Juarez is the northern region of the state of Oaxaca located on the South side of the mountain range that divides the Pacific from the Caribbean Golf. Going north to the Caribbean side we cross to the state of Veracruz, in which we find the Veracruz port that was also the port of entry for GMO maize brought from the US Midwest cornfields in the late 1990s. The territory of Yavesia, one of the communities where I stayed the longest is located on that state's border, high in the mountains surrounded by a forest that Yavesia farmers proudly protect. The people of the Sierra Juarez follow the federal and state laws but also, like in most indigenous territories of Oaxaca, they organize themselves according to their *usos y costumbres*. This is a system that empowers communal assemblies to elect their leaders according to their own traditions, without depending on State or Federal electoral schemes, as well as to rule and enforce their own norms with autonomy, within their geographical borders. Territories in the Sierra Juarez are communally owned and the selling of land is prohibited. Colonial, and afterwards, State owned and private enterprises have found these mountains attractive as a source of gold and timber (the State has defined this region as having a timber and mining "vocation"). The interest in the extraction of those resources is the main reason for the construction of the major infrastructure and roads that connect this region with the cities. While the timber industry is still active in this region (although not a major activity in the areas at the time I conducted my fieldwork), mining had been stopped due to the pressure by communities whose water sources are contaminated by extraction. A strong regional identity and ability to organize across communities has

emerged from the Sierra population's resistance to companies extracting wood and gold from their territories. The roads that once were used to take away their minerals and wood with scarcely any benefit for them also became an invaluable resource for fast communication between communities, enabling better organizing and actions that led to the ousting of these companies. That history still looms large in the memory of the Sierra Juarez population and informs their attitudes to the unexpected arrival of GMOs and to federal and state programs of rural [sustainable] development. These programs offer the Sierra farmers a toolkit of skills, technologies, and loans to increase their productivity and engage the regional market as a means to improve their quality of life. However, they also require changes in the meaning people attach to their lives and lands, for example, a different way to understand the work in the milpa. Those "improvements" seem to require a mindset that prefers individual entrepreneurialism to communal organization and a view of the land as a resource for increasing productivity and capitalization.

1. "You have to think of it as if it were a factory"

During the summer of 2008 in Yavesia, farmers attended several workshops where they were being taught how to increase productivity and successfully access markets. Don Armando, a 62 year-old farmer, attended most of them. This time he sits on an bench in front of the municipality building waiting not for the moment to enter the meeting room where the workshops usually take place but for an international phone call from his son, a temporal worker somewhere in the US. I usually hang around this area each evening after work. There are always people waiting for calls on these two public phones (so public that everybody can hear your talk), playing basketball, or just hanging around and chatting. Don Armando and his wife are taking care of their granddaughters

while their sons are overseas for work. It was probably because his sons were not available to give him a hand with his milpas that when I offered to help him out with any task in the milpa, Don Armando accepted and told me to meet him at his house next morning. He knew I was *el peruano haciendo servicio* (the Peruvian doing service/internship) in the community, so I didn't have to give too many explanations on why I was eager to do *campesino* work[16]. The next morning we were working on the *limpia* (weeding) of his milpa, near the river, after having a tea and some tacos served by his wife and his granddaughters who, at that time, had been living with them for almost a year. While loosening the soil to take the weeds out and strengthening the bases of the young plants, Don Armando, like other farmers I worked with, kept telling me that "there is no rush," "no need to work faster," "if we don't finish today we can finish tomorrow." I understood them as a courtesy to me, a foreigner not used to working with the *coa* (an old style shovel to break up the ground and loosening the soil), but, at the end of the day, it was clear he was trying to make explicit that the kind of work in his community was different from the experience I was probably used to in the place where I came from. When he commented on my presence there to be perhaps similar to that of some of the engineers' visiting them and offering workshops, I realized his statements on the pace of work in the milpa were also serving as a response to the engineers who had given a lecture a few days ago on increasing productivity and using one's time more efficiently.

A week earlier, experts from Fundación PRODUCE (The Produce Foundation)[17],

[16] No matter how many times I introduced myself as a student conducting a research, the people of Yavesia always said I was *haciendo mi servicio* (doing my internship) since I was participating of their working activities in the milpa and community work like some Mexicans students doing internships after college.
[17] The Fundación Produce defines itself as a non-profit association of producers that aims to "ensure more and better farming and forestry technology in Mexico" (COFUPRO 2012). It was created in 1996 by the initiative of the Mexican Federal and the Sinaloa State government but has offices in other states including Oaxaca (COFUPRO 2012).

SEDER (Secretariat of Rural Development), Fundación Comunitaria Oaxaca (The Oaxaca Community Foundation)[18], and ICAPET (The Institute of Training and Work Productivity[19]) visited Yavesia to see farmers' progress with projects these organizations partially credited: modules for the production of tomato and chili in a greenhouse and honeybees. They also took some time to give a workshop with directions to increase farmers' productivity. The engineer Santos from PRODUCE insisted on the need of farmers to invest time in training, "to learn about simple but innovative technologies, otherwise [if you say] "no, I don't have time to go to other [workshop]," you will stay there and you won't move forward, [won't progress]" and "if you [already] are good producers, now you have to be good sellers." That day, an audience of ten farmers who had waited more than an hour for him, were now listening attentively.

Later in his speech the engineer recommended that farmers grow organic products: "That is a good option, now that fertilizers are so expensive [you] have to go organic. Besides, the flavor of an organic tomato is much more tasty. Anything organic is much better, besides, it pays more, if not here in Mexico yet, it happens in other places, but that's where we are going (referring to the market trend in advanced countries where consumers pay more for organic produce)."[20] Then, after he ranked animals according to the agricultural value of their organic manure, waited a few seconds in silence and started

[18] The Fundación Comunitaria Oaxaca explains that, "it was born at the initiative of a group of businessmen and civil society organizations from Mexico City with the support of representatives from a few international foundations". They aspire to be "the leading organization in the promotion of sustainable projects that create opportunities for the generation of income and development in Oaxacan communities" (Fundación Comunitaria Oaxaca 2012).

[19] Instituto de Capacitación y Productividad para el Trabajo, or ICAPET, created in 1997, is an office of the Oaxacan State with the mission of "providing knowledge and skills to supply the need of the State's productive sectors. It also aspires to contribute to the increase of productivity of business and productive organizations". (ICAPET 2012)

[20] These farmers however already grow and eat organic products as many of them don't apply fertilizers to their milpas and they are also very aware of the difference in taste, in particular to the changes in corn taste.

referring to the farmers' milpas:

> "If you [think about] the corn that you sow there …I guess you want it for tortillas, don't you? I wonder if it isn't cheaper for you to buy corn in Oaxaca, to order it from there, warm it up, and then make the nixtamal (tortilla masa) instead of planting.[21] I don't know if that is cheaper or more expensive for you. But in my town, tortillas made out of the corn [we plant] are the most expensive tortillas. Of course maybe you are used to eating sweeter and tastier criollo (native) corn, perhaps because of certain traditions, but, ok, plant a part of your land and on the other part what you can do is cut and use the weeds. There are tons of good weeds which are very good for the animals, so you can cut them with a *machete*, … you chop them up, add a little bit of phosphoric acid and put it in a bag, take the air out and then after 15 days you have cooked pasture, which is called *ensilo*."

He was suggesting that the milpa land could be better used for activities other than planting criollo corn, such as producing food for animals, which is more expensive than imported corn.

Afterwards, he explained that the right way to produce manure was to enclose more than 50 lambs in a corral, thus producing in the same space more manure for their tomato-chili greenhouse. "What will I be getting?" he asks, "I will get money from that." Then, after estimating that one hectare used for corn plants could instead feed 50 lambs for a year and calculating the possible price of lamb barbecue for potential tourists, he said: "Don't get married to just one thing. Here the idea [we usually have] is that the countryside doesn't give us money and that is why people go to the United States, because there is no alternative, but if we work on all these things [we can find alternatives]. [...] The idea of all this is that you have in mind that this is a factory, not that: *today [I will work] a little bit but not tomorrow*. So, [we have] a factory that is producing tomatoes, this is a concept we have to have clear."

[21] Actually, everybody knows that buying corn from Oaxaca city is cheaper that growing it locally. Also the speaker tries to soften his comments about growing corn in this area; he knows it is not easy to tell farmers to invest time and energy in lucrative projects.

In clear contrast to these ideas, while we were working in his *milpa*, Don Armando kept telling me that there was no rush, that I had to take it easy. After we finished the *limpia* (weeding) at the end of that day, we walked to another plot where he let me collect a few apples. Then he showed me his three bulls pasturing near a small fen next to the river. He shared a few apples with them, too. When I asked if he thought of keeping them in a corral together (as the engineer suggested) he smiled and told me he gets the manure right from there where the bulls were tied. That morning during the *limpia* he also spent some time telling me about his experience as an alcoholic and how God and his brothers in faith (evangelicals like him) helped him to overcome his addiction. After that he talked about his milpa and the time and effort it takes to free soils from the need of chemical fertilizers. I was listening to him while putting soil on the bases of corn plants in my furrow with my *coa* and thinking that he was probably not changing the topic of the conversation from his alcoholism to the problems with chemical fertilizers. After a pause in the conversation I asked: so, are chemical fertilizers an addiction? Might it be the same with [imported] improved seeds? and he nodded. He told me how bad he was under the influence of alcohol and the uncontrollable need of consuming it, and how sad and worried (and about to break apart) his family was, and how deeply he had damaged his body and spirit. Afterwards, when he started talking about his and his neighbors' use of and eventual dependence on [chemical] fertilizers in their milpas, he was finding parallels with his own struggles. That small piece of land and crops we were working on was clearly not a factory for him[22].

[22] Don Armando was seeing a milpa dependent on chemicals fertilizers or/and foreign seeds as a problem beyond the economics of the family expenses and land productivity. Since the milpa is not only a corn plot but an axis of the family life and the economic and social interaction in the communities of the Sierra

Besides Santos, the engineer, other officials have expressed concern for the limited profitability of communities' *milpas*. The biologist Carola is one of many young professional "*promotores*" (promoters) who serve as *in situ* advisors for promoting development as well as producing diagnosis and development plans in communities of Oaxaca each year. She explained to me that her work and that of the institutions they work for is focused on activities that will bring profits to farmers. For that reason, they don't work with corn since, as she says, "it is [just] traditional and they actually lose money by growing it." [23] Two weeks after our conversation, her program coordinator, Diego Juarez, came to the community to give a workshop on corn in which he suggested the introduction of seeds from other communities, since they seemed to be more productive and resistant to the weather.

Nevertheless, as in Santos's speech, corn cultivation is frequently subtly referred to during workshops in ways that "other" it as that non-productive, non-lucrative, time-consuming, traditional, backward practice in the Sierra Juarez (where, due to the lay of the land, is impossible to dedicate big extensions of land to monoculture) opposed to other factory-like practices that would bring cash to the community and require a different farmers interaction with their territories, community, and themselves. Mexican scholars have pointed out the work of the *milpa* is an axis of the social, cultural, and economic dynamics within campesino communities, and in the Sierra Juarez, as Arturo

---

Juarez, Don Armando sees a more complex dimension of dependence and consequences of consistently applying foreign inputs to the milpa, beyond the consequences on productivity and his family's economy.
[23] Similarly, she was initially not too convinced of supporting farmers' request of funds to install an internet public service instead of a credit for strictly farming activities. She thought a request for a satellite internet system wouldn't be funded by State development offices since it wouldn't be seen as a sound business plan for farmers. The persistence of the municipal authorities (not interested in making business with internet but in providing that service to their youth for educational purposes, such as a research tool for the high school students' homeworks) made her find convincing ways to sell the idea of internet to state financial offices. Carola and other State officers worked around the restrictions to request the funds.

Robles (community member and professor at the University of the Sierra Juarez) a explains, it is, like other forms of organized communal work, such as *tequio*[24], the system of *cargos*[25] and the *guelaguetza*[26], central for the subsistence of the community itself as an institution that regulates equal access to and protect resources located within the boundaries of its territory. The introduction of foreign corn seeds such as GMOs and improved seeds [as they are] wrapped with a vision of progress, intensified productivity and capitalization might have an impact on campesinos' relationships with their community and lands. As I will discuss later in this chapter, these agricultural technologies and technologies of the self that were provided to promote entrepreneurial skills to campesinos also promote private ownership and other capitalist values in territories that are currently owned communally. In the Sierra Juarez, this enables not so much greater access to corn itself but, by fracturing milpa-like communal culture, to other resources such as gold, water, and timber. It is not a coincindence that those resources that allow for higher profits (instead of agriculture practiced by the majority of the population of the Sierra) have been historically sought by the State and corporate enterprises as defining the *vocation* of this region. Agricultural technicians and business experts from Oaxaca city teaching farmers to increase yields and attract economic prosperity also bring values that promote among farmers, for example, thinking of their territories as commodities.

[24] *Tequio* is unpaid obligatory work done by community members to support community needs. During my preliminary fieldwork I observed different attitudes to *tequio* from different groups of the population and different generations.
[25] Elected periodic positions in the administration of the community.
[26] Reciprocal work shared among members of the community given as a service or gift. It is not mandatory but expected in reciprocity.

2. "Don't get mad, eat with us, so that the work will turn out well"

Conversation during collective work, such as in the milpa, is, according to Arturo Robles, a common way in which information about the members of the community as well as local news and knowledge of the world are spread in Yavesia and other communities of the Sierra Juarez. Gossip or frequent jokes during work not only enable a space for the transmission of information and values but also set the mood and pace of work. The milpa for example, as the *sindico* Carlos explained me, has been the occasion for farmers to talk about GMO corn, foreign seeds, the impact of fertilizers on their seeds, and their impressions on the relations between the US and Mexico. There are conversations about the assumed similarities between GMOs and improved seeds and potential problems.[27] Not only the explicit rejection of non-local seeds[28] or for example the verbalized admiration for neighbors that maintain their lands free from chemical fertilizers (or recover them from "such addictions" with *lombricultura* (worm farming), as the president of the community did, pointed out by other campesinos) but also their pace of work, the breaks, the intentional slowing down or speeding up, the time taken to have a drink or share some food, tacos or cookies, or the always shared time for resting at the end of the labor day have a rhythm different from that dictated by the market and production efficiency. For those Yavesia residents who have experienced the sped up life of the industrialized regions of Mexico and the United States this pace of work appears to be embraced as an explicit response to that previous experience. El Chester for example,

[27] While working with corn plants, campesinos also speak about politics of corn. Daily activities of traditional familial and communal work are themselves performed behavior that talk back (sometimes recognized as such) to the kind of life-system in which those foreign seeds where imagined and found a fertile soil.

[28] Local seeds are those that families have inherited from their ancestors and have been planting and taking care of.

while working in his milpa with workers older than him (among them myself), told us about his hard work planting flowers in the Millennium Park in Chicago, the long hours with few scheduled pauses, exposed to the sun working for a landscape company. He said, "I know Chicago", "I don't like that lifestyle and the coldness of the gringos", ("*ahora vivo mas tranquilo")* "now I live more at peace" and *("aqui se come mejor*") "Here we eat better", he repeated a few times in the conversation during our work in the milpa. And whereas he and us, his workers, worked intensively in the *limpia* that day, we stopped freely to take breaks, tell jokes, and talk about many things along the day (such as about the Incas and the Zapotecs in our countries –El Chester said laughing: "it is funny, a long time ago people traveled from North to South [referring to early human migration flows in the American continent] and now everybody wants to move to the North"). At noon he fed us with plenty of beans, a pasta soup with meat, and tortillas just cooked by one of the neighbors next to his milpa. "In Chicago we worked like machines" he commented at the dining table located in his neighbor's patio. Now, in Yavesia, he has a few milpas as well as horses and bulls he uses to exchange labor with other citizens that need to till their lands. Few days before he explained, "We, in Mexico, say "*bueys*" (bulls) to our friends because we work together" while untying the yunta (traditional yokes) out of the bulls after tilling the lands and planting corn, squash and beans all together in Señora Cindy's milpa. This was also hard work however at the end of those days of work in Chester's and Cindy's milpas we the workers didn't just leave the milpa to go home but all sit and rested chatting for more than 10 minutes.

A similar attitude was common in other collective work situations that were not milpa work. Whenever I didn't find work in a family milpa I had always the chance to

join and participate in activities done by the *topiles*[29] in community work building a wall, a public bathroom, paving a road, or clearing out weeds on the bank of the river or the water channels after days of prolonged rains and small landslides.

In May 2008, with just few limpias to work on that month I spent most of my mornings and afternoons collaborating in the construction of a public bathroom next to the catholic temple and remaking a wall next to it. Work here was done by *topiles*, young community members who start participating in the system of *cargos* by doing activities (unpaid work like any cargo) coordinated by the *Sindico* and his assistant, the authorities in charge of the community infrastructure labor. In this work we prepared the cement mix, sand, and water (with shovels) and gave it to Isidoro, the bricklayer who worked in the fine parts of the bathroom. We also torn down a wall that needed to be replaced because it was old and it was falling apart putting at risk the neighbors who transit on the other side of the wall. Everyday work started at 8:00am and ended at 5pm with several occasional breaks. These breaks were just informal pauses, part of the rhythm of work itself but we had a main break for lunch from 12 to 1 pm. The first days I was treated with distance by the three *topiles* collaborating but after four days they started joking and teasing me. Around 10 am, usually a *topil* would say we needed a snack if the *sindico* or his assistant hadn't asked anybody yet to go to a nearby grocery store to get it. In those sunny days we usually kept working while a *topil* went to pick up sodas and cookies bought by the municipality. When they arrived with the box of sodas and cookies "*Emperador*" everybody stopped working and took their time to eat, drink, and keep chatting. One of those mornings, Don Ramon, the assistant to the Sindico, offered me the cookies and the soda saying: "*Don Jose, no este molesto, coma para que el trabajo salga*

[29] The lowest rank in the communal system of cargos.

bien" (Don Jose, don't be mad, eat so the work will be done well). He meant that the product of our work will be better if I work in a good mood, a consequence of eating well. He was saying that to me and not to the other *topiles* who were always engaged in chats and games of teasing each other while working. I was not particularly serious that day but less talkative. Food would be a reason for me like for the others there to be happier while working and do a better work. However, the food to feed the young *topiles* were not the tacos that more adult workers eat in their milpas but sweet sodas and cookies distributed by Pepsico[30]. That day after I came back home I tell that anecdote to Juana who was cooking my dinner: "Don Ramon told me to eat to be happy and to get a work well done" and I asked her, is that how the work gets better results? And she told me unhesitant: "*Pues si"*, ("of course"), not doubting that happiness at work as an outcome of sharing a snack will bring a work well done, then she smiled and kept cooking and talking with me siting at the kitchen table. Such distractions during work are not seen as a problem but rather as contributing to "a work well done," and by that they meant, besides taking their time while working, the durability of the outcome.

"Si se trabaja contento el trabajo sale bien" [If one works happily, the results are good"] I was also told by several campesinos. One of the older campesinos I visited in his milpa and interviewed later in his house recalled during my interview a moment in which, while looking for him, I slipped and fell on the steep and muddy access of his milpa. He told me I did the right thing after standing up because I didn't "get mad and complain at the ground/earth". "Things don't work well when you get angry," he said. For the same reason the *Sindico* Carlos and his assistant, Don Ramon, suggested that work has to be

[30] When I asked why not tacos or a good *agua* of those delicious drinks people prepare here Don Ramon said: *Tiene razón don Jose deberíamos comer algo mejor, pero esto es lo que le gusta a los jovenes…* "you are right don Jose, we should eat something better, but this is what the youth like..."

done in a good mood. The slow pace, the interaction, and the importance of food to achieve that state of worker well being are important components giving shape to expected work outcomes. The slow pace however became fast motion when we saw rainy clouds coming or when we engaged in competition games to, for example, transport the mixed cement in carts from a motorized cement mixer to the road we were paving in town. Similarly, the pace of work responded to the mood of the fun and jokes, while tearing down the wall next to the temple's public bathroom. One of the *topiles* called this wall "*el muro de la verguenza*" ("shame wall" which is the way how the Mexican media call the wall in the US-Mexico border), which everybody found funny, and when Don Ramon, repeated, "*el muro de la verguenza*" smiling, everybody started hitting it at faster pace for a few seconds. That wall that divide Mexico from the USA, as anti-GMO activists argued in Mexico city, doesn't allow the flow of people of corn from the North to the South, but it is conveniently permeable to flows of transgenetic corn to the South. Several Yavesia farmers have memories or have heard from their relatives stories of crossing that border in harsh conditions.

3. Against the grain: "the challenge of enjoying your own decisions"

A sunny July Friday morning the megaphones of the Yavesia municipality reminded the community of a workshop that would take place in the meeting saloon in few minutes. There were already some farmers waiting at the door but still not a significant number for the officials of the Fundación Comunitaria to start their workshop. They and members of the community working for the municipality were arranging the long benches like pews, setting up the powerpoint projector, and trying to darken the room for a crispy screening of their slides. While a few more farmers were arriving, the

officials were also passing around a registration sheet explaining the purpose as keeping a record of the people who attended the presentation but also as having proof that they, the officials, actually gave this presentation. In those forms, they asked for names, phone numbers, and business information, state of residence, productive activities, etc. Under phone number all participants wrote the number of the municipality since they don't have home phones and under business name everybody wrote "*emprendedor"* (entrepreneur) as the official handing them out indicated.

A woman of the Fundación team formally dressed introduced the workshop:

> " We will talk today about a topic called "do your micro-business." We work with the Federal Government and have been giving workshops to all people that are very entrepreneurial. Who are entrepreneurs? Those that wish to *salir adelante* (literally go out forward, but also move forward), want to improve, and those that say: *ok, I want to set up a business because I want to earn more money, I want to improve my life standards*. We are a bank, a financial institution (...) our objective is to give loans and financing. (...) The government is interested in the reasons why people don't pay [their debts]. In the 1994-95 there was a crisis in which business people fell into debt, why? Because many businessmen said *I want a loan, maybe support from the government*, and it is true, we receive support but the most important thing is to know how to use it, right? ... we [banks and financiers] don't want businesses that work perhaps half a year, one year, but then, because of bad management, the business disappears or their project disappears."

Eleven farmers from Yavesia were listening attentively, most of them were already involved in two productive projects supported also by the municipal government: a greenhouse project to produce chili and tomato and a project of honeybee production. They put to work these businesses with (50%) loans from the State government and an (50%) investment of the community/municipality. They have already attended to several training workshops presented as opportunities to improve farmers' skills and productive capacity with the ultimate goal of enabling rural businessmen and their enterprises to grow while making optimum use of initial and subsequent loans. In some cases, such as

the workshop I cite, they are not offered by the State or Federal government but by private organizations, non-profit institutions that, in coordination with the government, train and give loans to farmers. As they explained, their strategies differ from previous unsuccessful programs because government technicians were more concerned for reporting to their bosses in centralized governmental offices, while officials like them, from private institutions, have "a direct commitment to the producers and their [economic] success."

However, as I argue, these training activities, as other programs promoted from the State and conducted by private institutions, focus not only on shaping profitable businesses but also on the transformation of farmers subjectivities for the same purposes, with a particular vision of their territories and cultivation. Corn cultivation and the culture of milpa haven't been explicitly targeted by these training activities recently (with the exception of an informative workshop given by a development promoter about PROMAF, a program that promotes the idea of seed substitution when technicians consider it is needed to increase productivity), but, like in the engineer Santos' speech, it has been tangentially referred to in ways that "other" the culture of milpa by opposing it to the productivity and progress (and better life standards) implied in the technologies they promote. Milpa collective culture is contrasted to other practices that are supposed to bring more opportunities of individual development. Similarly, individual development understood as economic growth (the focus of many workshops) by capitalization and expansion of own businesses is presented as a path to collective well-being.

In this Friday morning workshop, farmers were lectured on the "importance of having your own business." The main reasons to pursue a private business as the

Fundación officials explained were: "the opportunity to rely and decide for oneself without depending on others (...) with a project that is *finally* mine, (...) [which means] the earnings are ours instead of others' ", but as they state, "my economic and personal satisfaction is also others' satisfaction." The speakers made clear that the responsibility and commitment involved in the development of one's own business implies a change in attitude that each individual would need to work on. This is the "the challenge of enjoying your own decisions." By this, the speaker seemed to be actually challenging the farmers to take action t*o improve the quality of their life*, suggesting that not only were they not already making their own decisions (and benefiting from them), but that the proper arena of taking these steps was the market. Then, the speaker continued saying:

> "because when we have a project such as those you are working on, tomato and honey, you have to make your own decisions, which means to manage your own business, and that's when it is going to be demonstrated if *we* (a veiled way of saying "you") are really capable of *sacar adelante* (bringing out forward/moving forward) a project."[31]

From the speaker's perspective, who works for a financial institution, individuals' accountability --a certain kind of financial adulthood--, is displayed through successful individuals' business endeavors. That entrepreneurial success, from her perspective, expresses individuals' commitments to self-economic improvement, that she later says is a means to collective satisfaction. It was clear in her speech that that was the path to enjoying and making life meaningful.

Like in the introduction to her speech, with a historical remark on businessmen's failure to pay back loans during the first years NAFTA was implemented, she also presents the responsibility of the success and failure of entrepreneurial endeavors as if it

[31] In the speech of these micro-business experts there were frequently insinuated parallel dualities of in/out, backwardness/progress, passive/active, childhood/adulthood (-responsibility), local/global.

were only in the hands of individuals, their skills, and their willingness to commit to the higher purposes of economic advancement.

Remarks like these are not casual in a context such as that of rural communities of the state of Oaxaca, and particularly the Sierra Juarez, well-known for its strong communal organizations, which in turn are sustained by their members' commitment to participate in community work and in making decisions that affect the life of their residents, as well as the use of their territory and local resources. Belonging, citizenship, and access to (and maintenance of) a space to live and cultivate in these communities is achieved only through engagement in communal work. That work and not individual economic success are the means to collective satisfaction mentioned by the speaker. While Yavesia have had local private businesses such as small grocery stores or bakeries for a long time, they don't constitute a significant source of capital accumulation, of prestige, or of social difference for their owners since the community as an institution tends to empower more those who dedicate more time to it. (Nevertheless, family businesses might provide the resources to invest that time in the community but actually marriage and higher number of family members are more relevant factors affecting their ability to engage in communal work and *cargos*).

During the workshop farmers listened to the speaker and read paragraphs from the text she provided, which repeated the speaker's ideas almost literally. They also participated by answering questions, showing every time that they were following the talk and understood the messages.

Subsequently, the speaker showed a slide saying: "Do I have the businessman profile?" In the picture was a businessman wearing a suit and holding a suitcase. Then

she explained: “a businessman has a collection of knowledges, skills, and aptitudes.” Afterwards she pointed out that he has a knowledge of what and where to sell (first within the community and later outside it), at what price, and how much time and money to invest, thus a knowledge to evaluate the viability of the product. The businessman’s skill is “to be able to sell”, which means that “how to treat people, ... and attitudes [are] something we can change, we can be nicer to our customers, and if I don’t have a good personality to attend to customers, I would hardly sell anything. But that is something I could change, I could be kind, I can pay more attention to my business (...) These abilities are those of public relations, communication, negotiation, as well as conflict management and resolution. These skills develop easily when the businessman has certain characteristics such as self-confidence, reliability, clarity in his goals, objectives and interests.” And then she explains:

> “Clarity in my goals [means] seeing the direction in which I am going with my business, knowing what to do to reach that goal, not just being content with a small production [and say] “*that is enough for us and that is all*”, no, you have to keep growing. We are going to start with a project, we are going to start with little, but the idea is to be able to, maybe, sell, I don’t know, in Oaxaca city, and then from there see what else we can do, but always think ahead, put yourself goals, objectives, with lots of motivation, objectives and concern for the others, I mean, to see if my client, perhaps the product I am selling is something he doesn’t need anymore with the same characteristics, what else does he need? we are going to see the package (...) what changes can we do to the product (...) a business always has to be taken care of, we have to be aware of the changes, what does the client wants.”

The speaker was not only presenting what she called a business methodology in which entrepreneurs have to set their own goals but she was also defining the goals the farmers should aspire to in their business. She not only promoted growth and continued expansion of businesses, w*hile disregarding other possible aspirations* but also defined a set of business-like personal qualities campesinos should develop. Moreover she framed

"concern for others" (a salient value in these communities) in the realm of the market, in which individuals' relationships are seller-customer interactions: farmers should see others as potential customers and, from that perspective, will need to be continuously updating their products in order to respond to customers' evolving needs. That is for the business trainers "concern for others." These values contrast with campesinos' practices, since most of them, in Yavesia, do not wish to put pressure on their lands to continuously increase their productivity in the way intensive agriculture does and do not engage in communal work or collaborative productive activities with their neighbors with as a market relation. The public realm sustained by collective work such as the *milpa*, the system of *cargos*, the *guelagetza* and *tequio*, is not a terrain of the market in Yavesia.

Don Armando, who was also in this meeting with other farmers I collaborated with during previous weeks and days after these workshops, was –as he explained me later- not focused on the profitability of their milpas beyond the satisfaction of their own needs and maybe that of a few neighbors. They were aware that, from the perspective of monetary cost-benefit analysis, the work in the milpa or their commitment to non-paid work for the community were not money-making activities. However what they considered important, for example, were the taste and texture of their own corn, independence from imported agricultural inputs, self-reliance, and work itself as a demonstration of commitment to the well-being of the community. Only those members living permanently outside of the community or under other special circumstances are allowed to maintain their connection with the community have the right of calling themselves Yavesia citizens who send money instead of providing material work. That is the case of many Yavesia citizens living in Chicago and Los Angeles.

In her study of the neoliberalization of Poland, Dunn discusses how "new forms of management shape not only the performance of work but also the kind of persons that workers become" (2004, p.20). In Yavesia as well as other communities of the Sierra Juarez where private and State institutions send experts to train and try to engage farmers in using profitable techniques, farmers are also expected to develop entrepreneurial work discipline that involve, for example, adapting their attitudes and behaviors to the fluctuations of the market and consumers' wants. From Dunn's perspective, at the individual level, this "regulation of subjectivities is an integral part of making capitalism" (Dunn 2004, p20). In a region such as the Sierra Juarez, situated in the margins of the Mexican State and recognized by it as "problematic" due to its history of revolts, engaging populations in a market economy reasoning applied to different spheres of life appears to softly expand neoliberalism as a project and implement forms of government at a distance. The development of conditions to transport communal as well as regional autonomy and self-sufficiency (defining values of communal pride in the Sierra, mentioned even in the regional hymn) to a market arena of individual and familial scale, responsibility brings also, as Clarke points out, subjects into new processes of regulation and "new forms of surveillance and scrutiny" (2004, p.33). This time, not directly the State, but financial institutions train and monitor farmers to succeed as businessmen and women and payback loans. Loans are approved for some crops, technologies, and activities but not others while farmers are required to comply with not only lenders' but also potential customers' desires. If, in the 1980's, autonomy and self-sufficiency in communal power of the Sierra Juarez pueblos represented a pitfall for the continued extraction of timber and until recently of gold, these same values seem to become assets

when displayed individually in the market. Clarke maintains that, in the process of matching the world with the neoliberal vision of it, the public realm as a collective body is dissolved to produce the public as the terrain of the market that ultimately is "the market of the private" (2004).[32] This move to the private in the Sierra Juarez would represent a fundamental transformation that not only put at risk corn and corn culture, but also the territories in which they grow and other resources. While transformations of personhood in the formation of the "enterprising self" implies for subjects to "carry the burden of risk, and shift it from the state [barely present in its margins] to the individual" (Dunn 2004), it also generates the formation of new territorialities (new relations between campesinos and their territories including their environment, domestic animals and cultivated plants). In a sort of double move, the State makes itself legible to defer societal risks to the individual -in the name of development- through new dispersed regulatory entities, and introduces conditions to think of land as commodity. A history of struggles due to foreign exploitation of resources in this region might find continuity with renewed legitimacy to land access[33].

4. The Grain

After meeting Don Ricardo in his milpa, the old campesino that considered wise

[32] Clarke's view of neoliberalism as a strategy not only enables us to explore what he calls "the gaps between ambition and achievement" instead of taking neoliberal worldview for granted (Clarke 2004, p.30) but also suggests the potential of finding the articulations that assemble neoliberalism as a project and alternative strategies as means of effective resistance.

[33] In this context, the controversy around the Mexico Indigena project, coordinated by University of Kansas professors Peter Herlihy and Jerome Dobson, as part of the Bowman Expeditions has especial relevance. Their training of farmers and mapping of individual lots of farmers have being interpreted by indigenous organizations as supporting of PROCEDE (Program for Certification of Ejidal [Communal] Lands) a Mexican federal program that has enable the privatization of collective lands. The fact that the Bowman Expeditions is funded by the US Foreign Military Studies Office (FMSO) and provides information for US counterinsurgency endeavors increases indigenous groups suspiciousness since armed groups such as the Clandestine Indigenous National Liberation Army (ECILN) and the Popular Revolutionary Army (EPR) had some presence in the Sierra Juarez (Weinberg 2000).

not to complain at the ground after falling down, we walked to his house, met his wife who started warming up a soup for us, and he showed me the altar and saints to whom he prays before sowing. I have seen those altars in every house I have been in Yavesia and in few Capulalpam houses. When we began the interview he shared with me his concerns about the changes he had been observing for a while in the ways other campesinos cultivate and treat corn in his community. In particular he expressed a concern for the youth unawareness of the existence of the spirit of the milpa. He said, "our parents and grandparents knew about this, they knew where the heart of the plants are" and then he walked few feet to a pot in the porch of his house, located in a hill from where I could see most of the town, and showed me in a transversal cut the core of the branch of a little tree he was growing, "do you see?" then he brings a maize, takes a grain in his hand, opens it and shows me on his index finger the less yellowish core inside, "this is the heart of the corn, but the youth here don't care about it anymore".

He explained me that people should be aware of the importance of respecting the earth/soil and milpita (corns) and of the fact that they have spirit. "the younger people don't know this anymore" he said.

Don Armando and Ricardo were the only farmers in Yavesia I talked with that articulated the importance of the milpa in terms of the existence of a spirit or a heart in it. However, after several conversations and interviews with campesinos of Yavesia I realized that they were actually very aware of the characteristics and interconnections between the soil, work, seeds, and fertilizers they applied in the milpas of many of the families living in their community. Doña Carmela, for example, my first host in Yavesia, also explained me that the soil of their milpas likes more their own seeds than others'.

She said, some terrains and certain seeds are used to each other and each family has their own particular kind of corn seed. They grow better in the soil where they have been given birth for years. Doña Carmela's father, a ninety-year-old man living in a nearby house, raised his children with food from his milpa and earnings from his work as carpenter. Later in life, he gave part of his milpa and the seeds he inherited from his parents to Carmela. Carmela told me it is not common to think of planting different corn seeds in your own milpa. "These are the seeds of my family," she said. But "sometimes we sell seeds," Carmela added, "some farmers do buy seeds when they lose their crops, when it rains too much or not at all". But they know whom to ask for new seeds. People know the seeds of their neighbors and also have an idea of these seeds' locally situated history and of which would do better in their own milpas. In those situations, they exchange products or labor for the seeds with their neighbors or simply buy them within the community. The community is woven with the thread of their seeds and the imprint of their families' milpas. In that context, foreign seeds are not so welcomed, though they could spark curiosity among farmers and an interest on experimenting with them.

"When the government gave us free seed packages," Arturo Robles explains, "many campesinos in Yavesia sometimes used these seeds as food for their animals or threw them out." These packages usually include "improved seeds" and chemical fertilizers. "The first package is free, but they know you have to buy the next one if you want to keep feeding your milpa with it." Still many use a little amount of chemical fertilizer to grow corn. During the first *limpia* of his milpa, for example, Don Eugenio told me about the advice he received from an engineer coming from Oaxaca city. While he was spreading with ungloved hands a small amount of diminutive white globes on the

soil of each plant, fertilizing them, he told me that a few years ago, when he was not working for the Natividad mining company anymore (in a neighboring town), an agricultural engineer suggested that he apply the fertilizers he showed me in his hands. I was listening, walking behind him while turning the soil out with the coa mixing those little dots with the dark reddish ground around the maize stalk. He told me he was satisfied with the improvement of his yields however, his wife, Dona Feliciana, in her kitchen told me one evening that she realized her family's corn seeds don't last in storage as long as they used to before the introduction of [chemical] fertilizers in their milpas. Don Eugenio and Dona Feliciana were my second host family in Yavesia and I had the opportunity to share plenty of time with them, at lunches and dinners. During that time in the kitchen it was common to see moths floating in the air. These moths they called *palomitas* (little doves) were always there as a disperse cloud above our heads, as part of the kitchen landscape. These *palomitas* that I had also seen in many other houses in the Sierra Juarez were actually a plague, the worm that grows in and eats the corn seed that families storage for cooking and for planting the next agricultural season. That plague was present not only in the corn itself but also in the kitchen. When I asked if they used to have these *palomitas* in their kitchen 30 years ago, before [chemical] fertilizers arrived to Yavesia, they said "no, of course not, there was not *palomitas* in those days". They as other farmers relate the extended use of chemical fertilizers to the production of corn seeds with less resistance to plagues' attacks.

In Guelatao, another community of the Sierra Juarez located right in the main road and ten minutes from Ixtlan, the capital of this region, don Emiliano, one of the few farmers that still grow corn in his town explained me that corn obtained from improved

seeds sold by CONASUPO[34] store "se pica mas rapido" (is spoiled sooner) than local seeds. He put some grains in his hand and showed me the tiny cavities and holes crossing each of those seeds from one side to the other. "These are improved seeds, they say," he said. Then, after a few seconds of silence that sounded like frustration to me, he remembered a time in which they didn't have to worry too much about the loss of kernels because the corn almost always lasted until the time of eating it or sowing it. "All that area was milpas" he said pointing to a slope north of his house, "now that is just weeds and even trees are growing". Not only do seeds spoil faster but they also make cultivation more expensive. Most of his neighbors don't plant corn anymore, he told me, because "*no sale a cuenta*" ("it is not worth it") since the cost of growing it and preparing tortillas is higher that the price of tortillas delivered to their doors. That reminded me of the noisy motorcycle I saw climbing up a street early that morning while I was looking for Don Emiliano's house. In a ritual that has been going on for the last years, the motorcycle rider stopped every few feet in the street, took from a styrofoam box a visibly warm package of tortillas wrapped in paper, and delivered it to the door of most of the houses. Two tortillerias located in Ixtlan have been delivering their product made of imported corn to the surrounding communities. That imported corn, as Don Emiliano pointed out, has had an impact not only in the landscape where his parents grew corn a while ago but also in their seeds themselves. Now no more that ten farmers grow corn in Guelatao and no more than twenty in Capulalpam. However, as Don Eugenio and Dona Feliciana suggest with the *palomitas* these seeds impact even a community where they are not used.

But Don Emiliano is also clear that those new corn grains differ in quality from

[34] Despite the fact that CONASUPO was dismantled in the 1990s, people still use that name for their state funded community stores. Those stores, however, don't serve the purpose of redistributing national production like before.

the native seeds. He recalled weighting two similar sacks of corn one of native and other of improved seeds. The native variety, he said, was heavier, while the imported "seemed to be full of air." He interpreted this as a symptom of lower nutritious value found in the imported corn. Similarly, a farmer in Yavesia also considered his native beans healthier than the improved varieties imported, since as he observed, his own seeds don't upset his stomach nor produce him flatulence.

By making visible different characteristics and/or effects of native seeds and improved seeds, and underlining the defects of the new seeds, farmers challenge the meaning of "improved seeds" brought to them by the State and private institutions or sold by CONASUPO stores. Farmers' observations of the problems brought by the seeds and the technology associated with them imply the question: Improved for what, and/or for whom? By unpacking the concept of "seed improvement," farmers are able to contrast the value of their own seeds, adapted, grown, and produced locally with those provided by the market and new technologies. Farmers recognize that even though the imported seeds are "improved" they don't quite *work*[35]. The imported corn in that way becomes a mirror that empowers farmers to see their work as valuable, and by the same token debunks the elusive speeches about imported technologies (of seed and selves) and makes the high-tech knowledge of the global green revolution tangible. In that mirror, that technological revolution appears just as defective as the improved corn seeds in Don Emiliano's hands.

Don Eugenio not only has milpas and fruit trees but also three trout-farm round pools half built a short distance from his house near the river. He obtained them under a

[35] Alvaro Salgado, a member of the Network for the Defense of Corn, from the CENAMI (Centro Nacional de Apoyo a Misiones Indigenas) also pointed out the introduction of GMO corn as a mirror in which indigenous populations growing corn see themselves reflected.

government-supported program that was supposed to provide him with half of the investment and technical support through a private organization. “That is kind of similar to what other farmers are currently doing with the chili-tomato greenhouse and the honeybee production projects” he told me one day coming back from his milpa, but added “we still can’t produce trouts as expected because the people that were supposed to complete the construction of two pools never came back, even though we paid and did our part as agreed.” He was not surprised but resigned, even though curious about how well the other projects were doing.

Other projects, as Carola, the development promoter in town, told me, also experienced some pitfalls because the loans and resources usually take too long to *bajar* (be *released* or “come down”) even after projects have been *subidos* (*submitted* or “sent up”) and approved[36]. That year for example the lot of bees requested by Yavesia micro-businesswomen/men was delivered after the first flowering cycle, therefore the valuable opportunity for honey production was lost. Similarly, Diego Juarez Martinez, Carola’s boss and a development promoter who worked with resources from PROMAF (Program of Corn and Beans), told me they also have disappointed other communities’ farmers they worked with a few times before because the economic resources were released very late, when crops were already harvested or about to be harvested. Even if late, however, he accepted his salary and gave training workshops on agriculture, thinking of this as knowledge useful for farmers’ next agricultural cycle.

For farmers, however, these delays, failures to fulfill agreements, or changes in

[36] The Spanish words, used by those promoters, for “releasing” and “submitting” documentation to/from the State and financial institution are what Ferguson and Gupta call “metaphors of verticality”. They imply the direction of the documents moving up or moving down and locate the State and financial institutions above them, as centers of reasoning, and the communities below them as the controlled body.

technology that replace previous ones already promoted by state and federal government related institutions appear deceptive. Nevertheless, the training of farmers to perform well with their credits, reproduces the idea of the State and financial institutions as centers of reason and control. Those institutions introduced in this region try to implement a discipline of paying back loans rewarded with an extension of credit limits and the recognition of an entrepreneurial status by a State and financial institutions that locate themselves above these communities. Other communities such as Lachatao and Amatlan that call themselves *pueblos mancomunados*[37] appear to have benefited from this support but, as Yavesia farmers point out, these *pueblos'* exploitation of their forest, even under certified sustainable techniques, have reduced their water supplies in the last decades. Yavesia farmers, however, that consider themselves the guardians of their mountains' forest and water have told me that their water flows downstream to the cities where different government agencies have their headquarters. "What would happen if we didn't take care of the water?" one campesino asked me, not in search of an answer but simply to point out a responsibility imposed on them, and their implicit power over the control of releasing [downward] water to the cities, the centers of regional decision making. Contrary to the State metaphors of verticality and encompassment reproduced in their bureaucratic practices and those of financial institutions promoting micro-businesses, farmers of Yavesia find themselves in charge of a geography of resources, empowered by their location above in the upper region of the Papaloapan river watershed[38] while the

[37] They include Yavesia as a *pueblo mancomunado* (an organization of neighboring communities managing the forest in that region) but Yavesia denies belonging to that group since that might include their territories and forest under patterns of exploitation they reject.

[38] However that watershed irrigates more lands in the state of Veracruz than in Oaxaca and did not directly provide the city of Oaxaca with water. Nevertheless, the water of the Yavesia river flows downstream to Tuxtepec (Veracruz), the city that used to produce paper with timber extracted from the Sierra Juarez forest.

government insists they are below the centers of political control. In that geography, they recognize, for example, their water as a tangible, free resource, which they release downstream. The State position of power is challenged in Yavesia by the recognition of its failure as well as of their own geography and power to control their territories. Such contradictions, the failure of the state and private agencies' officials to comply with their agreements in a complete and timely manner, and farmers' disappointments with imported technologies become a mirror in which farmers come to appreciate their own technologies and communal organization. These failures are those gaps that Clarke finds located "between ambition and achievement" of neoliberal dreams (2004). In those gaps farmers see themselves and [re]produce alternative visions of a world (as well as subjectivities) in which community work and technologies such as the work on the milpa and local corn is valued as better than "the others", those that come from out of the Sierra and overseas.

Chapter Two

How to Write about Biotechnology: Mexican Journalists Get Trained in "Sound Science"

During the last decade in Mexico, the relations between the Mexican government and the press have undergone significant changes. The impact of the transition from the seventy years of government under the PRI (institutional revolutionary party) to a less authoritarian regime enabled the conditions for a "transformation of the equilibrium of power with a consequent increasing importance of the so called factual powers: the business sector, the media, the church, etc." (Rodriguez 2009, p.46)[39] Those changes were encompassed by the reduction of state power and the dismantling of state institutions regulating the market. For corn farmers, the opening of the Mexican market to a global economy under the conditions of GATT and NAFTA meant less subsidies and the dismantling of a national system that ensured buying and redistribution of low cost food staples (CONASUPO), while for the press it meant a certain independence that resulted from the dissolution of the state monopoly of importation and production of paper represented by the State owned company PIPSA. As Campell explains, "the privatization of PIPSA undoubtedly loosened indirect state controls over print media" (2009, p.45).[40] That monopoly as well as newspapers's tax debts, government-paid

[39] There are still in Mexico many other forms in which different political parties and other powerful interest groups influence the work of journalists. I cannot write about journalists in Mexico without mention that they are direct victims of violence when their work question the status quo. During the last decade According to Laura Castellanos "Journalist associations and networks report an increase in the number of killings, kidnappings, and aggressions against journalists since the change of government in 2000, when the National Action Party (PAN, the political party of Mexican president Felipe Calderon and his predecessor, Vicente Fox) came to power. More than 60 journalists have been killed in the country between then and now. The advocacy group Artículo 19 says that since Felipe Calderón became president in 2006, 14 journalists have been killed and one disappeared". (Reyes 2010). Sovereign power and biopower measured out at once for the implementation of neoliberalism and so-called "democratic interventions" in Mexico.

[40] Campell continues saying: "at the same time, because the very same neoliberal policy directions that resulted in PIPSA's privatization have been widely perceived as contravening nationalist tenets and

advertisement, and the control over circulation and distribution were for a long time instrumental in government influence on newspapers's editorial line (Rodriguez 2006, Watts 2009). That material influence on newspapers ultimately had an effect of the everyday work of journalists and the news available for Mexican readers.

Coincidently, on the other side of the chain of news production, farmers of the Sierra Juarez during the 1980s fought fiercely against FAPATUX, one the three most important paper factories controlled by PIPSA (Zacarias 1995), to stop that company's irrational exploitation of their forests. In the heat of those struggles, the regional pride of being "serranos" (people from the mountains) that later fueled a strong attitude against threats to their corn landraces was strengthened[41]. During that time, the serranos formed ODRENASIJ[42], an indigenous organization for the defense of natural resources and for the social development of the Sierra Juarez. While that organization did not last for many years, it provided the context for local indigenous intellectuals to rethink the serrano identity and communal forms of organization they called comunalidad that is intrinsic to the indigenous culture of corn.

In this chapter, I pay attention not to monopoly of newspaper supplies or other forms of political control that were in place in Mexico in previous decades but to the stories of those who write the news while undergoing the influence of more subtle forces that give shape to the neoliberalization of Mexico. This is a story of journalists and their writings in the context of emerging *de facto* powers that aspire to influence public

---

working class interests, the problem of governance of legitimacy, of securing the "consent" of the governed, has been exacerbated" (Campbell 2009, p.45).

[41] Farmers who lived and fought during those times told me they were told by FAPATUX representatives for years that their forest had the pride of providing row materials for the paper of free school textbooks for the children of Mexico. The paper made from Sierra Juarez woods was probably not used directly for newspapers since the newspaper required sugar-cane but the production from Sierra Juarez trees certainly made possible the functioning of the FAPATUX factory.

[42] Organización para la Defensa de los Recursos Naturales y el Desarrollo Social de la Sierra Juárez

opinion about agricultural biotechnology. The normalization of bio-technology and its agricultural practices through its public acceptance, as expected by the biotech-agro industry would impact the life of Mexican farmers and their landscape.

For my study, I selected experienced Mexican journalists that write about agriculture and attended training workshops organized by the biotechnology industry. These journalists' main work, however, is to write what journalists' call "the note of the day," which is daily news instead of editorial articles. There are other journalists (and scholars) engaged in the resistance against the introduction of GMO corn in Mexico who also write investigative pieces in newspapers but, while their work contributes to the debate, it does not fall into the category of daily news.

1. The journalists

I called Lourdes Rudiño for the third time this week. But now I am already in Mexico City. I left Yavesia for a few days to conduct a few more interviews with journalists I couldn't reach last time I was here. They write about economy and agriculture as well as environmental issues in national newspapers with major circulation. My previous conversations with Mexican journalists made me aware of the active "informative" interaction between the biotech agro-industry and journalists. Journalists stories about that interaction deepened my curiosity about these relations and the biotech-companies' strategies to influence the formation of public knowledge on GMO corn. A veteran journalist of the economy section of her newspaper told me that, regarding the controversy surrounding the introduction of GMO corn, the " [biotech agro-] industry knows that if they win the public opinion, the battle is won". I asked myself, What are the means for fighting that battle in the media? What are the discourses? What enables the

discourses of the bio-tech industry to find a space in the daily news? How journalists locate themselves in this process of knowledge/information production? What are the visions of the global produced in this context? How are particular views of the global normalized and its sacrifices humanized? That afternoon, Rudiño's answer on the phone was similar to those of other journalists I have contacted: "I don't have time today and I don't know what my schedule will be like tomorrow; please call me tomorrow morning, I cannot set a time to meet with you yet." I also knew from other journalists that she was particularly busy. I became especially interested in talking with her not only because she had been writing for several years in El Financiero (a business oriented daily newspaper) and afterwards in La Jornada (a newspaper closer the Mexican left) about agricultural biotechnology but also because she was granted a journalist award by AGROBIO[43] and had been invited on educational tours and workshops organized by the biotech industry. She was probably the journalist who had attended the earliest and the most educational events offered by the biotech industry to Mexican reporters.

The next day we finally met at the cafe De la Selva in the Fondo de Cultura Económica bookstore in Coyoacan. She gave me just 30 minutes, so after a few questions I started asking about the AGROBIO award. After a silence she told me: "I don't know whether or not to regret it. What happened was that I once wrote a report about transgenes. That was my first trip to the USA. I wrote a series of articles related to what

[43] AGROBIO (the name stands for agro-biotechnology), a Mexican institution formed by a coalition of member companies such as Monsanto, Dupont, Aventis, Novartis, and Savia. As this institution state, its mission is "to create a favorable environment for the development of this modern technology in Mexico" (http://www.agrobiomexico.org.mx/agrobio.htm.). Agrobio objectives are: "Sensibilizar a la sociedad sobre los beneficios de la aplicación responsable de la biotecnología en la agricultura, mediante el flujo de información relevante con bases científicas sólidas. Representar a la industria relacionada con la biotecnología agrícola para colaborar en el desarrollo de políticas y regulaciones nacionales que fomenten el cuidado del ambiente y la salud, además de la inversión y la transferencia de tecnología. Promover el vínculo entre el sector académico y la industria biotecnológica, con el fin de reforzar la capacitación e investigación estratégica en biotecnología agrícola" (AGROBIO 2008).

transgenes are, about their use to produce other kinds of products such as pharmaceuticals, reactors, and that is why I was given the award". She expressed some shame for participating in that contest. AGROBIO has been working for years to create a "favorable environment" (AGROBIO 2008) for the introduction of their products, GMOs in the Mexican countryside. This award was one of their means to make it happen by engaging not only journalists but also scientists and students in research and writing that supported a positive view of agricultural biotechnology in Mexico.[44] Luis Camacho Gaos, president of AGROBIO in 2005, explained the motivation of the award to be that of promoting a particular -"right"- way of informing the public about biotechnology: "We think that science, if it doesn't have the right divulgation, is still inert investigation that stays on the desks, in the labs, and society has more needs each day of knowing what is happening in our labs and research centers" (Hernandez, J. 2005). Joel Hernández, a journalist for El Dia newspaper, paraphrases the AGROBIO spokesperson calling for participants to enter the AGROBIO contest. He describes the purpose of the award to be to"(...) continue the promotion of a "culture of informing properly" about the benefits of the use of biotechnology and to end the myth that GMOs are harmful for the health of the human organism as environmental NGOs such as Greenpeace have stated without showing evidence of that in Mexico" (Hernandez, J. 2005). In calling for participants for this award, Julieta Fierro (Director of UNIVERSUM and jury in the contest) explained that the award "is fundamental for the divulgation of knowledge, because it is part of the education to understand the world of science and biotechnology. We invite all media to participate in the contest since, through their research about biotechnology, society will be well informed about what GMO food is." She as well as Manuel Robert Diaz (Center

[44] In 2005 the award included a certificate and an economic help of 40,000 pesos (around 4000 US dollars).

of Scientific Investigation of Yucatan), Juan Manuel de la Fuente Martinez (Monsanto), and Luis Camacho Gaos (president of AGROBIO) were part of the jury in 2005 (Hernandez, J. 2005).

Rudiño was the first journalist to receive this award. Her recognition made other journalists aware of an appropriate way of writing about [bio]technology and knowledge within the "evidence-based" framework of a "culture of informing properly," both terms used by the biotech industry as if they were contrasting their 'sound science' with information provided by organizations opposing biotechnology in agriculture. The award thus would reward the compliance of principles of objectivity and evidence based reports, which are both conditions that define the high professional standards of journalists. This award for Rudiño's report also let her colleagues know of international events such as the one she attended in which they could deepen their understanding of this new agricultural technology. Nevertheless, the hesitation Rudiño's expressed about having received the AGROBIO award, as she explained to me, was based on her concerns for the impact that award might have on her image in connection with her attendance of Monsanto events. If she initially thought of the award as a means for advancement in her career, now that she writes in La Jornada (and works closely with Víctor Suárez, ex-congressman, director of ANEC[45], and organizer of the Sin Maiz no hay Maiz Campaign) she was afraid of her work being seen as the product of a "-(...) chayo, un embuste, un pago por servicios" (a prebend, fraud, a payment for services) (Rudiño, L. (2008). Personal interview). However, to make clear this was not the case, she said upfront "In these trips we always try to be critical, and ask, inquire, not just say whatever you are saying is the reality and [that] is how I will [be] publish[ing] it." (2008).

[45] Asociación Nacional de Empresas Comercializadoras de Productores del Campo.

Rudiño's participation in workshops and educational tours overseas organized by the biotech industry as well as the recognition she received from AGROBIO for her journalistic work were appreciated but also criticized by other journalists who had attended similar tours and, like Rudiño, made clear they don't compromise their independence and objectivity in reporting about the technological development of the agro-business. However, Rudiño's award in the eyes of journalists such as Nancy Pedraza and Javier Galvez (who also used to cover news on agriculture and environmental issues), gives a sense of the ways in which favorably writing about the biotech business is also rewarded by it. These awards are not only symbolic recognitions and sources of prestige among some, but also come with monetary prizes that AGROBIO called "Economic Help". In 2005, that economic help was US$ 4000. By the time Rudiño received the award "(...) she was writing for El Financiero about it, -Galvez adds- so that means money. (...) Journalists have their own position but at the time of writing some are the armed arm of one or the other side of the fight."(Galvez, J. (2008). Personal interview).

While this award on the one hand provides prestige to those journalists reporting and fulfilling the agro-business criteria of scientific objectivity and evidence-based information that relies on so called "sound science", on the other hand for others it highlights situations in which the independence of journalistic practice might be broken. These perceptions, as observed in my interviews, reinforce the self-image of independence in writing and professionalism on journalists who decide to stand far from those awards even though they still attend and report from tours and events funded by organizations such as US Grain or Monsanto. "If I were doing that I would have already traveled several times to the US," Galvez said, to make his point that journalists working

like Rudiño are also rewarded in other ways, side from a prize for writing. While Galvez himself has not been invited to US Grain or Monsanto tours in the US, he and some of his colleagues have participated in similar tours in Latin America.

Pedraza and Galvez explain, however, that their editors ask them to be, "very balanced" when writing about corn and GMOs, "...because in a way we are more from the center [than other newspapers]" Galvez explains and he continues: "I am of those that are not in favor nor against it, still. Instead, I demand research and that those in favor and those against [GMOs] demonstrate their position and reach a point of equilibrium. Because I don't think that the world will end due to transgenes, besides, we [already] eat them. (...) all the oils come from transgenes... from Argentina." In the same vein, but in a different interview, Galvez tells me what Argentinean farmers he interviewed (introduced to him by Monsanto) told him about the impressive increase in their production, adding: "Now, Greenpeace tells me that we have landraces [corn], as if they had once touched the soil, let me tell you (...) Yes, [he imitates Greenpeace spokesperson] because indeed we have landraces that can give us the same or better yields [than Monsanto]". And then he asks for evidence: "Why they don't give it now? Why they don't do it?, so, that makes you think." (Galvez, J. (2008). Personal interview) Galvez and Pedraza were critical of evidence supporting the statements made by organizations that they define as pro and against GMOs. While Monsanto had farmers sharing their positive experiences with GMO seeds, organizations such as Greenpeace were seen as not having evidence to back-up their claims. Both Galvez and Pedraza, like other journalists, were anchoring the debate of GMOs on the proof of risks to human health and the increased yields with GMOs. These examples discussed by journalists while talking about the objectivity and

factuality of their investigations, are, however, the topics that, as we will see later, make up the terrain on which the biotech-industry wants to situate the controversy, excluding approaches concerned with the impact of GMO in food sovereignty, impacts to ecosystems, and the culture of corn.

Whereas journalists participating in the biotech educational tours are able to recognize the promotional purpose of these tours and the links between the biotech industry, the scientists, and the farmers introduced by the tour leaders, some of them still portray the information provided in those interviews for their reports as representing different voices. That gives journalists elements they look for to write a balanced story.

Matilde Perez, journalist at La Jornada tells me that her editor had given her permission to go to Honduras and Argentina on Monsanto tours with the only condition being that she "brings also the other perspective" (Perez, M. (2008). Personal interview). She recalls herself thinking that day, "how on earth I am going to get the other perspective," recognizing that she will most of the time be subjected to the schedule of her tour organizers. In Argentina, Monsanto took her to labs in Rosario, Pergamino, and agricultural fields in the countryside, besides the ExpoAgro, a four-day agricultural technology exposition owned by El Clarín and La Nación media groups[46]. That agenda did not give her enough time to conduct an investigation outside of the constrains of the tour schedule. Perez, different to other journalists, looked for a couple of Argentinean scientists who had conducted research about the impact of GMOs in different parts of Argentina, but she was not able to contact them. She had met them in Mexico some time before and -as she explains- she at least had their book with information she used to include two small paragraphs about the other side of the story. "Still, most of the text was

[46] These media groups publish two of the most important newspapers in Argentina.

with Monsanto," (Perez, M. (2008). Personal interview) she said. Nevertheless, that attention to obtaining the other sides of the story, in the eyes of journalists, balances their reports while displaying objectivity and reflecting on independence associated with journalistic practice.

As several journalists pointed out, their attendance at agro-business educational tours overseas also represents an opportunity to see their own country in a different light (Galvez, J. (2008). Personal interview)[47]. Rudiño, explains that, despite of the fact that Monsanto can try to make you reproduce its perspective, "it is an issue of your own criteria, but I think traveling opens your eyes, and it enables you to understand things that you [previously] didn't understand; it enables you to have a more comprehensive view, a more balanced [view] of the things, doesn't it?" (Rudiño, L. (2008). Personal interview).

About the opportunity that these tours give to journalists to broad their perspectives for improving their professional work, Rudiño explains:

> I think that, perhaps, there are some prejudices, certain visions that as journalists you have to try to avoid, because you cannot marry one [particular] vision. Of course as a journalist you have social responsibility and you should not compromise yourself by becoming involved with the economic interests of a company, especially if what is at play is health, the environment, campesino activities, that are [all of them] very useful for the economy and, [also] for the development of a country, that is fundamental. However, you shouldn't be closed minded. Sometimes it seems that the media or that journalists take one side or another. That is something I was talking about with Angélica [Enciso, a journalist of La Jornada who also writes on the same topic] because you shouldn't be closed minded. I think that it is important to know, to observe the viewpoints, even the scientific arguments, non-scientific arguments of any kind, and express it, and the reader will make his/her own decision or will elaborate his/her own opinion and this topic is like something very new. After ten years of transgenetic crops it is still something very new, something hard to communicate about due to its terminology. Now it is not that [hard] but I also remember that at the beginning [of this technology] to say 'transgene' [required

[47] As he also recalls the association of Mexican environmental journalists has even requested support from the government to attend international events but there have been internal (in the association) conflicts to select which journalist will receive these benefits).

> explanation]. I remember once I wrote something about transgenes for the newspaper and they edited it and replaced that word for something like "organic"; they thought that "transgene" was "organic" but now there is more knowledge [about this technology] in society. So, I think that attending these trips, if at first it might seem that it is in the interest of indoctrinating journalists, in reality they open up your vision. It is evident that in these trips they will always put you [in front of] people that will tell you marvelous things, farmers that tell you 'I was able to reduce my costs of labor, my use of agro-chemicals, and with the transgenes things are going very well', but you have also to see what happen in your country, and observe the characteristics of the crops in the USA, of their corn. They are particular, very different from those we have here in Mexico, aren't they?"

These opportunities to expand their perspectives and to contrast Mexico's situation with that of countries already planting GMO corn leads Galvez to observe that: "What happened is that there [in Argentina] the smaller [production farmers] are smaller but any of those smaller [production farmers] are bigger than ours. Their cultural level, they think about the economy [and] they can talk with you about soccer as well as politics and you can talk with them of books by Jorge (sic) Cortazar as well as Octavio Paz while our farmers never have read anything, so there is a big difference" (Galvez, J. (2008). Personal interview). Galvez links his impressions of the Argentinean farmers's level of education with their decisions of planting transgenes and alleged benefits of engaging in agro-biotechnology. The experience of meeting them and being exposed to the technology displayed by the tour organizers got him thinking that Mexican farmers were left behind in a competition taking place worldwide:

> We [Mexicans] still rent our tractors, the oppression of a system so closed-minded such as that we had, so lacking in a vision of development, of growing, so oppressed by campesino organizations, and campesino leaders with the consent of the government. All that has left us behind, [there is] an enormous gap [with advanced countries]. You go to Chile or Brazil and see what they are doing, (...) we are far behind. (...) I talked with the small group of [Argentinean] farmers that was going with us [on the tour]. It was a small group and we talked with the scientists that are developing the multiple [transgenetic] events, because before it was the Bt but now is the Bt12u and later come the BtMm and Xx. They keep

> including more events and now you [can] talk [about it] with Argentinean farmers. A farmer told me: 'You know what? I used to produce 8 TN [of corn], now I produce 19 TN per hectare. It is convenient for me (...) before I used to lose up to 40% of my crops due to plagues, now I lose 4%' and they keep telling you marvelous things because for them it worked. That, of course, doesn't mean that it will also work for farmers here, but for them it worked very well and that is what you can transmit [in your reports] because that is what they are telling you. Then you go with the scientists and they tell you, in the USA we are doing this in Iowa and here in Argentina this, and in Brazil that. When we were there [in this event in Argentina] we were informed that Brazil just released the [authorization] to sell [newer] transgenetic corn [seeds]. We got the news dispatch from Brazil, and [we knew that] they have land for that, and then [we receive information about] this, and that, ...so, shit, that makes you think! [laughs]" (Galvez, J. (2008). Personal interview).

Matilde Perez, also express her views of the educational tour as an opportunity and of Mexico's agricultural technology in the mirror provided by Monsanto:

> "In Argentina they have like ten years [of experience] with transgenes, and now they are conducting tests with corn and then, with soybeans, [it is] very interesting. They even told us: 'if you want to work on a journalistic research report you can [also] do it via internet, just get connected [with us], [just] tell me', I wish I could know more [about] that area [of expertise], we should know it more deeply. But if they convince you you fall into the hands of the devil. They also show us US machines to select seeds that analyze I don't know how many millions of seeds each of them each minute: that was impressive, I was impressed with that technology, it is admirable. (...) I had seen similar machines here [in Mexico] but those have been surpassed [by Monsanto's technology], I saw them [the Mexican machines] in 1997 in a center of studies at the Universidad de Morelos." (Perez, M. (2008). Personal interview).

Perez, Rudiño, and Galvez point out that participation in events such those organized and funded by the bio-tech industry represent opportunities to expand their knowledge of genetic engineering applications in agriculture and, if overseas, also to gain a broader perspective on the issues they write about. They, along with Nancy Pedraza recognize that the industry's motivation to organize tours, grant awards, and conduct workshops is not just to educate journalists but to gain media support and ultimately

public support. However, as these journalists argue, their commitment to the golden rules of objectivity, facticity, and independence (Tuchman 1978) allows them to maintain the quality of the information and the standards required by their editors. The compliance with these norms legitimates journalists's professional practice.

Dodson's analysis of professionalism in war journalism during the 2003 Iraq invasion, points out that professionalism "serves as a "regime of truth", and as such it creates a space for the uncritical reproduction of military perspectives "and constrains journalist's critical, self-reflexive capabilities" (2010, p100). Dodson's analysis is useful not only to understand the practice of journalism in a scenario of war like the one designed in Iraq - where embedded journalism and reports from the Centcom shaped the mainstream media view of the war but also it shed light on other contexts in which journalists experience constrains and are strategically seen as instrumental for advancing particular positions. In Mexico, the efforts for gaining acceptance of GMO corn in the public opinion and the reconfiguration of the agrarian landscape as imagined by the biotech agro-industry require also the engagement of journalists' writings.

As observed in Mexican journalists's reports of information collected during educational tours overseas, they don't elaborate or make explicit in their reports the constraints they are experiencing at the moment of their work (the closest example of this is an article by Rudiño in which she presents as news industry's strategies of inducing consumers' acceptance of transgenes). These constraints are not considered by journalists to be relevant news or revealing information for their readers. On the contrary, journalists attending educational tours look for resources they have at hand within their imposed boundaries in order to produce reports that will provide diverse angles and, ultimately,

balance them. The borders that shape their constraints are overlooked in their writings. When Galvez told me in the interview that "they know how we [journalists] are" (Galvez, J. (2008). Personal interview) he was referring to the fact that organizers of the biotech industry tours were able to recognize journalists's needs of having different interviewees, and made their life easier by facilitating access to them. Those provided conditions satisfied the requirements journalists seek for balancing they stories, at least in appearance.

Pedelty (1995, p172) calls journalists' illusion of professional distance enabled by the formal fulfillment of norms of objectivity, evidence-based investigation, and independence "conscious non-reflexivity." While knowing the imposed restrictions under which they are writing, journalists decide to conceal those limitations in order to protect their professional identity and present their reports as objective representations of the real world. Dodson (2010), goes further to argue that journalists' professionalism acts as an 'ideological fantasy', a concept coined by Zizek to explain that individuals overlook the unconscious illusion that constructs reality, no matter if they recognize or not the contradictions within that reality. What matters is the fact that they act according to the illusion, not that they know what is actually happening. Subjects are aware of how things are but not of the illusion in which they engage and that is constitutive of that social reality. This is not an understanding of ideology as a mask that hides reality but "the level on which ideology structures the social reality itself" (Žižek 1989, p.30). Dodson (2010) explains that professionalism is an ideological fantasy for war journalists reporting on the latest Iraq invasion. Despite the fact that they are conscious of the imposed constrains to expand the scope of their investigation and of their limitations to

report both sides of the story, professionalism provides for them the illusion of 'doing things right' according to rules that Dodson points out constitute a regime of truth[48] that he calls a "regime of professionalism." While reporting that reality, journalists are not only reproducing the ideological fantasy of professionalism but they are also overlooking they ways in which their participation in such construction becomes instrumental for advancing the interests of US military strategies.

This analysis can also illuminate the role of journalism in the battle that a veteran Mexican journalist suggested was happening when the biotech industry attempts to gain public opinion support. Mexican journalists are not blinded about the biotech industry's motivations for promoting an award for investigative journalism or for inviting them on educational trips with no opportunities to collect information from sources other than their biotech hosts. However, that awareness of participating in activities oriented to influence them is not reported as news[49]. Journalists maintain a "we are here, we have to report what we see" attitude that responds to their ideal of fact-based, objective practice, even though, the fact that what they see is only what they are being shown is overlooked in their writing. A 'balanced' story is constructed with interviews of different actors, all of them introduced by their tour leaders. "What they overlook, what they mis-recognize, is not the reality but the illusion which structuring their reality, their real social activity" (Zizek 1989 p.33).

[48] He uses this term in Foucault's sense, explaining "that professionalism is also a regime of truth (Foucault, 1980) in which only articulations that reinforce and reproduce the professional legitimacy of journalists are permitted, even when a journalism that supports military strategy results" (Dodson 2010, p.99)

[49] (Only in one exception, Rudiño included in a 2005 report an interview to a US Grain representative explaining that strategy as a standard practice by the US Grain to gain public support) Rudiño does not include her own voice as a journalist participating in activities aimed to gain that support.

Moreover, the controversy surrounding the introduction of GMO corn and the interest for gaining the acceptance of Mexican public also carries within it the forces that leads to the stabilization of particular views of the global, including the articulation of particular values and social and economic relations. 'Balanced stories' unfolded in certain terrains play a role in that stabilization. Those forces, in the case of our journalists' experiences, tend to promote writings that reflect a particular arrangement of the world: one that they can see, touch, and listen to with their own senses during educational tours. The performance of industry officials sharing their promising strategies (and their achievements) in a competitive world market of maize seeds, scientists explaining the technological application of their un-biased principles while visiting their labs, the appearance of new corn byproducts, the strong and harmonious movements of agroindustrial machines, the experiences of successful farmers told while walking between beautifully green corn plants on immense and homogenous monocultured cornfields, and their potential articulations with current problems/opportunities told in narratives of hunger, technological backwardness, plagues, or scarcity of resources are all enacted for the journalists during those few days. Journalists' visits to Agro-Expos, the impact of receiving during the tours, press releases of other Latin American countries authorizing GMO corn planting, and the success of other farmers, target Mexican journalists 'hearts and minds' and for some it creates the impression of a need to hurry up to catch up the wave of progress. This experience is, as all journalists interviewed define it, an eye opener: the illusion itself, however, is overlooked and has an impact on the imagined world they locate their reports in and constitute while writing. In that context, the ideological fantasy of professionalism enables for the biotech industry the possibility

of having journalists reporting its perspective, even presented through different voices, due to the extensive scientific information and potential interviewees with first hand stories it provides them. But those partial stories of GMO corn that the industry expects journalists will tell also carry within a particular vision of world interconnections that also reach the columns and pages of Mexican newspapers. Those stories of GMO corn are seeded with calls for neoliberal globalism that flourish become present in the daily news. If the legitimacy of science is obtained by repetition, -in this case a repetition of a representation of success of GMO technology -, we could see neoliberalism as a global order (and the commitments to it) looking for its legitimacy performatively through the repetition of stories of success in the media.

2. Discipline in news writing

When I asked Matilde Perez why she, as other journalists, doesn't include in her articles a critical approach to the problems she observes, why journalists usually don't discuss in writing what we were talking about at the table that afternoon, she asked, "how do you include the context [of the news] in [an article of] 2500 characters" (Perez, M. (2008). Personal interview). While she and her colleagues are aware of the conflicts and power interests behind the story they write, they are limited to what they call the note of the day. The material constrains on characters, lines, and columns: the economy of ink and sheets of paper itself[50] add further limits to their on-going obligation of maintaining an objective distance from the story they tell of, complying with the discipline of telling the daily news in a reduced space.

[50] That economy of paper was probably more visible when the state controlled the monopoly on the importation and production of paper. Limits on lines, characters, and pages, and the ensuing discipline of journalists, is required by newspapers to make a profit.

Perez tells me that is how things work and that she expects her readers to be able to form their own viewpoints without the intervention of the journalists' opinions. Similarly, Rudiño expect that readers should follow the news day by day and be able to trace connections and make their own opinions. More cynically, Galvez (who started his career a while ago as a journalist in the crime section) suggests that he has no hope of his readers' ability to follow the news and be critical, since, as he tells me, he thinks "Mexicans don't have a historical memory" (Galvez, J. (2008). Personal interview). This is more apparent for him due to the fact that no matter what the news about the political candidates is, they still elect corrupted leaders, and people quickly forget the corruption, even after scandals are widely publicized by the media. Perez points her index finger at me while she tells me that the critiques and the analysis are actually the work of the scholars. Some of those scholars also write in newspapers, but Perez's work like that of the other journalists is mostly the note of the day[51]. According to Galvez and Pedraza a critique or trace of a personal opinion in the news would be considered a transgression of the principles of professionalism by the editors[52]. They gave me as an example, with a gesture of approval, the style of Miguel Angel, a colleague they see as objective because he actually does write exactly what he hears, and, from their perspective, without intervening between the voices of workshop speakers and the readers. "He is totally neutral", Pedraza said.

[51] There was however always an attitude of complicity when she and other journalists provided me with material they thought would be useful for my research, but which they couldn't use due to the constraints on their writing.

[52] They however recognizes the high quality of Perez's work despite the fact that they see her including critiques in her articles and taking a side in the controversy. They point out that Perez and other colleagues writing in La Jornada are against GMOs and pro-NGOs.

Perez also recalls the times when just a few journalists were assigned to cover the news she was writing about. There was not much competition, she said. “When I was sent to report on a conference or a public event I actually had time to stay longer” and listen to a few more talks beside just the keynote speakers. Now they only have time to take a few pictures and collect some basic information they need to write their notes. In the past, she explains, she could stay longer in conferences and learn about whatever was being said. That was a great time for her and as she was able to educate herself by listening to the speakers she had to report on. But now it is different, she explains, the competition requires from her more efficiency in the ways she manages her time, she needs to be in many more places in one day and is always rushing. Most journalists navigate the city everyday to collect information in order to write about the news, interviews, demonstrations, conferences, and events they are assigned to and that are considered relevant to tell to their readers part of the stories they write about in few lines. There is not much time to think about it. While listening to Perez, I felt fortunate for having more than two hours to talk with her with no more interruptions than the occasional questions of a waitress. Later in the conversation, she told me of the anticipation she experienced when she knew she was invited to Buenos Aires for an educational tour. “I always dreamed of visiting at least a bit of Argentina” (Perez, M. (2008). Personal interview) she said. This was her second invitation by Monsanto. The first time she traveled with them to Honduras, but now it was a country she really wanted to visit. After the everyday rush of hunting news, she and other journalists regard these assignments overseas with joy. They know the organizers will take good care of them and they will have entire days on

that tour to learn about biotechnology while the information and interviewees they need for their reports will be conveniently available to them.

Back in Mexico City, after attending the Monsanto events in Argentina, Perez recalled receiving in her office at the newspaper a press release sent by AGROBIO. During that time, in 2008, she explains that Robert Zoellick, the president of the World Bank was also in the news warning of the urgent need to tackle the global food crisis. The AGROBIO news release, in the name of Solleiro [well known Mexican scientist working for the biotech industry], explained again the benefits of GMO technology and its advantages for facing the food crisis (Perez, M. (2008). Personal interview). This was one of multiple releases AGROBIO sent to the newspapers but the message, according to Perez, was a repetition of what they had already said many times in previous releases. Perez didn't want to publish it as it was. "I won't publish a press note from it [that release news], I won't do it - she said- I need to talk with Jose Luis Solleiro, why is he talking in general terms, I want him talking about the specificities: Mexico? what's up [with those seeds here]? how?, when?, where? what is the alternative? they again repeat the same discourse that we have listened for two or two and a half years, that [they have] the greatest alternative, but even if they are [just] repeating we have to question it again" (Perez, M. (2008). Personal interview). Other newspapers and journalists, however, she said, publish those press releases without questioning them as news. The use of news media for the repetition of the same and similar messages is intended to have an impact in gaining terrain for the legitimation of GMOs among the public. As Villalobos[53] (a Mexican scientist that supports the use of GMO corn) explains, "the media participate

[53] Former Executive Secretary of the Commission of Biosecurity and Genetically Modified Organisms in Mexico.

greatly and influence public attitudes of acceptance or rejection of these products" (Villalobos 2008, p.46).

Perez, explains to me she can't be objective, implying that objectivity, or neutrality as Pedraza called it, is involved in the decision of not rejecting sources such as an AGROBIO press release. She points out she is subjective while writing the news but that she also has a format and style to follow for writing it. Otherwise her work wouldn't be read as professional. Nevertheless, when she can she does research to provide the political economic context of the news she reports. When she has the opportunity to ask questions in her assignments she always situates herself as Mexican. She said, that position gives her perspective while listening about the wonderful potential of GMO technology. From that approach, her questions first explore "to what extent that technology would work for us [Mexicans]?" Rudiño also explains that she tries to keep her critical approach while collecting information by always situating herself as Mexican, questioning the effectiveness of that technology for her country. It would really be too expensive and not worth it to have a GMO seed designed for each different area of Mexico. However, that approach is not always translated into journalists' articles. Galvez told me that technology "worked for them but there is no assurance that it will work for us", however, as he said afterwards: " [still] it worked for them so I have to tell it as it is" (Galvez, J. (2008). Personal interview).

Similarly, Perez told me with some pride about a moment during her Monsanto tour in Honduras in which she asked a scientist a question that cornered him by pointing out the limits of GMO corn for Mexicans:

> "[Monsanto scientists are] Ph.Ds. of a very high level, but sometimes one asks silly questions. I am a reporter, I am not a specialist of anything. So suddenly I told

> him, 'wait a little bit, would we still be able to eat cuitlacoche if we switch to GMO corn?' [this is] the fungus, a disease of maize, that we Mexicans eat as a delicacy. It is a little black fungus, you will probably find it, it is exquisite and seasonal for us. That was my question and he hesitated to answer, he didn't know what to say. He was explaining to me with little apples and pears [as if I were a child] in the most simple way to convince me that transgenes are beneficial. (...) 'Doctor, forgive me for this silly question, but I was worried about this thing, I asked you this question as a citizen and Mexican that like to eat cuitlacoche. I think I really disturbed him [laughs]." (Perez, M. (2008). Personal interview)

This information, which could give some clues to Perez's readers about the uncertainty of biotechnology and the possible impact on Mexican food culture, was not included in the report Perez published in La Jornada about information provided in that tour. It was published by her years later, however, in the voice of Alejandro German Repetto, an Argentinean farmer introduced by Monsanto that expressed concern for the impact of Bt corn on the Mexican access to cuitlacoche (La Jornada May 6, 2008)[54].

On April 19, 2006, Lourdes Rudiño published in El Financiero an article entitled "Transnationals Induce the Acceptance of Transgenes." Unlike other journalists, in this article, she turns information provided by Andy Benson, Vice President of International Relations of the International Food Information Council foundation (IFIC) in his talk during the 2006 US Grain educational tour into news. Benson's talk, entitled "Consumers' Acceptance of Agricultural Biotechnology and Risk Communication Approaches" provided information such as round-up ready soybeans impact on the reduction of CO2 freed in the environment operationalized as numbers of cars parked for one year; a comparison between percentage of Chinese farmers who grow and those who don't grow Bt showing symptoms of pesticide toxicity; percentage of institutions that develop transgenics categorized as public or private (showing private sector as a minority); and concepts such as substantial equivalence which served as the context for

[54] She talked with the farmer about that topic and the farmer expressed his opinion.

the speaker to minimize the importance of detractors' arguments and to conclude that information about GMOs is a matter of perspective. These were meant to be examples of how information can be more clearly presented to consumers, but Benson's presentation did not further elaborate on the different communication approaches to biotechnology as announced by the title of his presentation. Rudiño's article cites Benson and focuses on the interest of the biotechnology industry to improve public opinion about their products. In her article, she reproduces Benson's view of the biotech industry companies as a minority with legitimate authority, "a handful of companies that has a wide support in the United States, the government as well as universities, medical and environmental institutions, to the extent that all of them are registered in the IFIC, which is spending many dollars to communicate a positive view of biotechnology to the public" (Rudiño 2006). She notes in her article, moreover, that they are facing the challenge of "permanent public demonstrations of organizations such as Greenpeace with messages that make these products be seen as non-natural, toxic, and the equivalent of Frankenstein" (Rudiño 2006). The article then points out that the education of the public, the appropriate use of words such as 'biotechnology' instead of 'GMOs', and the recognition of "modern biotechnology as a science based in ancient principles of selective genetic crossing of plants" are strategies to induce acceptance of biotechnology.

This article, different from most of the news published[55] about the GMO industry, reported on the biotech industry's interest in inducing public acceptance of their products, but Rudiño's rigor for avoiding comments about her sources makes her reproduce in the daily news the industry's view of the needs for educating the public. She also does not

[55] Silvia Riveiro, investigator of ETC and editorial journalists at La Jornada has already published several editorial articles criticizing and exposing Monsanto's strategy of gaining public opinion with the work of Estrategia Total, a public relations company that focus on lobbing in congress.

recognize in her article that journalists themselves, and not an undefined general public perceived by the industry as potential consumers, are the immediate target of this strategy in these educational tours that journalists attend. By reporting this strategy as daily news and pointing out the industry's efforts to influence public knowledge, Rudiño's piece appears to be exposing industry strategies of influencing public knowledge in Mexico. However, by overlooking the role journalists play in this strategy, Rudiño, like other journalists, not only protects her professional identity as an objective reporter but also, without realizing it, participates in the structuring of the conditions sought by the industry. Her practice of professionalism, like that of other journalists, requires her to withhold the subjectivity involved in accepting or rejecting information for telling the story and, while writing, to avoid wordings that could be perceived as personal opinions. By uncritically exercising professionalism, journalists give room to reproducing industry officials' representation of the biotech corporations as victimized institutions, seen as a minority that, while having the support of the US academia and government, still experience the backlash of institutions such as Greenpeace that [arguably] misrepresent them. Rudiño is not unaware of the biotech industry's intentions, but still her objectivity dictates her to present the voice of industry officials without a critical note that would contextualize the story portrayed in Benson's talk. The approach taken by Rudiño did not conflict with the editorial line of her newspaper, El Financiero[56].

Other articles that Rudiño published in April 2006, based on information collected during that year educational tour, were equally informative and reproduced the view of

[56] El Financiero is a media outlet that aspires to be "recognized globally in the economic, financial and business spheres" (El Financiero 2010). NAFTA and biotechnology applications to industrial agriculture were reported by her as an opportunity, while in La Jornada the same topics are published in the context of discussions regarding problems for food crisis, food sovereignty.

the biotech scientists, industry and business specialists, explaining the recent technological development and benefits of GMO products, Mexico's lagging behind in the global market of GMOs, and the limits imposed by the Cartagena Protocol to the expansion of the biotechnology market in Mexico. Related to these latest two topics, Rudiño's articles portrayed (in the voice of Jose Luis Solleiro, director of AGROBIO), Brazil, Argentina, and Colombia as being ahead in the Latin American context of agroindustrial production with biotech seeds. In a different article elaborated during the same period, she presents Mexico as "up against the wall" (Rudiño 2006) between the restrictions of the Cartagena Protocol and the commercial flexibility of NAFTA, following in this case the ideas of Wayne Parrott, a plant breeding and genomics scientist from the University of Georgia, who views Mexico as being caught between two ratified international agreements and the consequent limits to biotech expansion.

Salvador Maldonado, a Mexican journalist from El Milenio newspaper who was also attending the 2006 tour, based his articles on the same sources and reproduced similar perspectives without including critical reflections for his readers in Mexico City. Karina del Angel, a Mexican reporter from "TV network Canal 11", also in the tour, produced a TV report, aired in April 17th, with similar information. Her report, entitled "Development of Second Generation Transgenes", gives voice to biotechnology scientists Jose Luis Solleiro, David Fisher, and Harvey Glick to explain the benefits of that new technology. However, it ends by saying: "Although there are no studies sustaining the innocuity of modified food, scientists state that they are safe for human health" (Del Angel 2006). While questioning the legitimacy of statements about health made by scientists supporting GMO technology, her focus on food safety and security, not on food

sovereignty, and the optimistic view of biotechnology presented as news, still upholds the terrain in which the industry wants to locate the controversy. Nevertheless, she made use of standards, recommended for journalists and provided in the tour, to "talk back" to the biotech industry. During those days of April 2006, Mexicans were exposed to more media reports with a positive view of biotechnology as a consequence of journalists participation on the educational tour, as in previous years tours.

As Nancy Pedraza and Javier Galvez see it, their role as journalists is to bring the daily news to their readers. For that purpose, the information of current events has to be presented in the most transparent way. Their crafting of an objective and balanced report relies on providing 'un-compromised' descriptions and the voice of interviewees from both sides (as them and other journalists explained) of the story without any critical statement or analysis that could be read as the journalists' opinions. As one journalist put it otherwise it would be seen as editorializing. In this spirit, their articles reproduce not only the voice of government officials, scientists, and agro-business representatives among others but also indigenous groups, farmers, and anti-GMO activists in Mexico. Balanced journalism is performed not only article by article but also understood through time as journalists also give voice to one party one day and the next day to the other while expecting their readers to " follow the news and form their own opinions" (Rudiño, L. (2008). Personal interview). By distancing themselves and presenting the voices of the news protagonists, journalists aspire to provide a balanced, fair representation of daily events. This practice, ruled by the principles of professionalism, presupposes the equal condition of the different parties involved in a controversy. In the GMO corn controversy in Mexico, however, industrial and small production farmers, indigenous activists,

diverse environmental and social justice groups, and biotech companies all have different power and means to make their demands be heard to. The press, imagined as a flat terrain in which different parties can be listened equally, makes journalists overlook the fact that even if lines, paragraphs, and stories are distributed fairly among different groups represented, this economy of news writing -lacking histories or contextualization- does not provide the means to overcome the power differentials of the various interest groups. Not only do the different material, social, and political capital of each group have an impact if their voices are taken into account, but also they affect the authority attributed to their discourses themselves. In particular, the language of science becomes more appealing to the practice of writing fact-based information about biotechnology. In this respect, the emphasis of biotechnology companies on training journalists to discriminate their sources and information based on the use or not of "sound science" appears to be an attempt to de-legitimate alternative discourses used in claims against the use of transgenes in Mexico. It is also a means to discipline the resistance, a means of making the other speak in the language of science and in the terms of the biotech companies in order to be listened to. The news media thus serves as a slanted mirror in which the other is expected to perform like the one entitled to speak in order to achieve visibility and to be taken into consideration.

With the interest in training journalists, the International Food Information Council Foundation (IFIC) provided them, during the educational tours sponsored by the US Grain Council, with the manual "Improving Public Understanding, Guidelines for Communicating emerging Science on Nutrition, Food Safety, and Health." First published in the Journal of the National Cancer Institute, this document offers

suggestions in the form of key questions "to help ensure that sound science and improved public understanding are the ultimate guides to what is communicated and how" (IFIC 1998)." The IFIC, an organization supported by PepsiCO, McDonalds, and Cargill, among others (IFIC 2009), elaborated this manual with an advisory group formed by members ranging from Monsanto to the Harvard School of Public Health. In it, the attention paid to the work of journalists reporting on "emerging food technologies" focused on the concern for ensuring that their writing would properly communicate issues related to health and food safety. This information delivered to journalists in the context of an educational activity focused on biotechnology in agriculture and food production tends to frame the discussion about GMOs as one of health and food safety. In Mexico, where the controversy around the introduction of GMO corn brings into the debate concerns for the impact of that technology on national food sovereignty, genetic diversity, and culture, the use of a framework designed to place the focus on food health, safety, and nutrition from a "sound science" perspective can exclude different concerns raised by activists and dampen the legitimacy of alternative means of expressing them. Not only are journalists expected to "ground their reports in basic understandings of scientific principles" (IFIC 1998) in order to write about biotechnology but also, in the slanted mirror of the press, interest groups confronting the introduction of GMO corn are prompted to translate their concerns into that language. Their authority is diminished if they speak in their own terms[57].

The communication guidelines of the IFIC for journalists proposes a "critical standard" that, as suggested by its key questions, have to be "applied to all sources of

[57] For example, as I discuss in chapter five, farmers' and activists' claims of a causal relationship between GMO contamination in milpas and malformed corn plants are not only dismissed by scientists but also by other activists that require scientific evidence to back up their arguments.

information - from scientists, to public relations/press offices, to journals, to consumer and special interest groups " (IFIC 1998). The guidelines start by asking journalists as a main question if their story is accurate and balanced. In subsequent questions that frame accuracy and balance, it asks for the credibility of primary sources and then if reputable scientists and third party sources believe the study is reliable and significant. Those third party sources are expected to represent mainstream scientific thinking. Otherwise, journalists are recommended to state that "such opinions or commentary differ from most scientific perspectives in this topic" (IFIC 1998).

On these guidelines, journalists are also inquired about the appropriateness of the wording they use to describe the findings of the investigation related to the topics they write about. Specifically, when referring to the appropriateness of talking about findings in journalist articles, the guidelines state that "cause and effect can only be shown directly in studies in which the intervention is the only variable modified between the experimental and control group" (IFIC 1998). The guidelines also ask for a "healthy skepticism" from journalists that requires them to separate facts from emotions or commentaries. This "critical standard" tends to favor the authority of scientists possessing the material and cultural capital that enable them to locate their findings in the category of mainstream knowledge over the possibility of lay persons and non-scientific organizations to attract journalists' attention to their claims. It also inserts into the professional discipline of journalism standards --that Dodson (2010) called the regime of profesionalism-- that would make them hold or take away authority from information and claims against the industry when they can't include proof -sustained by the mainstream scientific practice- of a relation of causality between the industry actions or products and

effects on health and the environment. “But -as Yearley says- the science is so complex, the models so subject to uncertainty and the wait for observational confirmation so prolonged that the need for ‘hard scientific’ evidence is commonly invoked by those eager to slow environmental reform”. (2000, p.228) Not only, does this paradigm use a lack of scientific evidence to legitimate in the media practices that involve the prolongation of enterprises with negative consequences such as the development of super weeds resistance to herbicides,[58] but it also implicitly transfers the burden of proof of environmental damage to the victims in the eyes of journalists. That concept of risk is also presented in this communication guidelines as a variable in the equation of “risk/benefit trade offs” (IFIC 1998). This trade off, presented in the context of a narrative of global scarcity, reduce risks as necessary and worthy sacrifice of that new technology.

Organizations such as Greenpeace that have engaged the “technical dialogue” (Yearley 2000) in other causes and countries, have not directly conducted lab research and testings in Mexico, but they have used findings and data collected by organizations such as the Unión de Científicos Comprometidos con la Sociedad (UCCS) and the Centro de Estudios para el Cambio en el Campo Mexicano (CECCAM). Still, among these organizations, resources for conducting research instrumental to participate in the “technical dialogue” about genetic engineering is limited. When journalists such as Galvez and Pedraza think of the movement against GMOs in Mexico, however, they think of Greenpeace and express expectations of technical evidence based information to back up their claims as if they didn’t have it in the first place. These journalists’s views of

[58] Already being observed by farmers using biotechnology to grow corn, soy, and cotton (Neuman and Pollack 2010) .

organizations opposing GMO technology in corn agriculture (portrayed like Greenpeace with an emphasis on their more visible repertoire, activities such as street performances or rappelling down from the roof of the congress meeting room to unfold banners) as emotional and as loaded with unsubstantiated claims, are similar to the ways the biotech industry represent their detractors. Those representations that diminish the authority of critics are shared by presenters of talks during educational tours for journalists. Benson's use of humor to make fun of detractors' perception of risk about biotechnology, during his talk at the 2006 educational tour, is an example of it[59].

Educational activities such as tours and workshops, and awards for journalists organized by the biotech industry not only aim to provide journalists with criteria and stimulus to write about biotechnology in agriculture but also to legitimate sound science selective standards in the media. By nesting those standards in the broader context of the regime of professionalism, the biotech industry aspires to turn them into a discipline of journalistic practice. Authoritative presentations of the IFIC criteria for producing news during educational events, as well as constant repetition of stories of success on interviews and press notes and in the voice of different subjects, such as farmers and scientists, aim to normalize the borders of information to be communicated as news (a warranty of truth) and ultimately the ways the public read and talk about GMO agriculture. These normalizing strategies work through the self-disciplining journalists and readers and intend to bring about stories of the efficacy and inevitability of bio-technological development as well as of a global agricultural market in which nation states compete to supply with food a world of hunger. These articulated stories, repeated

[59] He showed in his power point presentation a cartoon of a monstrous genetically modified plant attacking a citizen.

in the media press, prompt and award commitments to a vision of global interactions defined by the free circulation of goods, and [bio]technology through national and regional borders. These forces and stories constitute what Tsing points out to be “a set of scale-making projects” (p.161) that give to the dreams of neoliberalism their effectiveness. As she explains, this view of the world “must be brought into being: proposed, practiced, evaded, as well as taken for granted” (Tsing p.161). In this process journalists,while aware of the purposes of educational activities, find no actual oportunities to talk back due to the constraints imposed by the regime of professionalism.

Chapter Three

From flesh to flour: Globalizing tortillas and the gourmet response with *native* corn in Oaxaca.

Early in the morning in Yavesía the sun is still behind the steep mountains and the town is flooded with a blue light that becomes whiter while the sun goes up. Women leave their houses and walk to the community mill with heavy buckets in their hands. They carry on them a mix of corn boiled in water with a bit of lime powder. This was probably the corn their families had threshed earlier, sitting, as usual, in circles in their patios. "Everything goes in there," Carmela explained days before when I helped her thresh a bucket of corn after requesting to participate in the process.[60] Indeed, everything goes in there except, of course, the best grains of the cob which are selected by farmers to serve as seeds for the next planting season.

That early morning, like other mornings, the women came back home with their fresh nixtamal masa, a dough made of corn soaked and boiled in water with a bit of lime and then ground on their community mill. Once in their houses they will divide the dough into little balls, press them and obtain thin fresh tortillas that they will heat on round pans called comals. Families will have those tortillas for days for every meal and men will carry them for lunch filled with meat, beans, and herbs as tacos in their milpas or their work in the forest. I remember the variation of colors and flavors of their tortillas: an outcome of the kind of corn each family grows and ultimately a reminder of the family seeds inherited from their parents. Doña Fabricia presented me with curiosity one morning her fresh tortillas made of maiz pinto. She wanted to know what I thought of

[60] Later I realized that touching that corn in that process was transgressive, tortillas made of the corn I threshed were separated from the others. Fernando Ramos, a community member confirmed my observation. He explained me that threshing the corn was a process that many families still consider intimate.

these thick and pure purple tortillas that came from corn plants with different but mostly dark grain colors. She, of course, already knew how good they tasted. I only agreed impressed by the soft texture and flavor. I agreed and ate more of them with the bean soup boiled with epazote herbs. I also in that moment thought of the impossibility of finding those same tortillas, that same flavor, anywhere else but in Doña Fabricia's kitchen since each family keeps their own corn seeds, the seeds that, -as the farmers explain it- "prefer" the soil of the plots where they plant them. Smiling at the table, Don Eugenio, a few years older than Doña Fabricia, was not taking the tortillas for granted. Still, however, once in a while, I heard from some old farmers that tortillas don't taste as good to them as they did before the arrival of the mill to Yavesia. Before that time their corn was turned into dough by hand on metates, stone grinders used for that purpose by their women instead of a metallic machine. In those days women used to spend several hours a days in the making of tortillas. The flavors are different now, they said, but their women have more time for other things.

Also in Yavesia, two or three times a week, a small red 1980's Volkswagen drives around the town loaded with warm fresh tortillas coming from a tortillería located in Ixtlan. Only those who don't have any more of their own corn available buy tortillas from it (less than 10 percent of the population of Yavesia don't have their own sources to corn but even those with not enough land available plant corn in the small spaces they have in their yards). While some tortillas are sold, that car usually leaves Yavesia still loaded with tortillas, and without any room for me to sit for a ride to the highway when I have to go to Oaxaca city. When I spoke with the driver before leaving town one morning I could see the tortilla packages steaming in the back seat and in the space where the passenger

seat had once been. He was not selling much in Yavesia, but still included this town in his route. In Guelatao and Capulalpam however, towns situated on the highway to Oaxaca City, tortilla sellers have no problem selling out their product since most families there don't grow corn anymore. Corn and tortillas sold by local business are less expensive than growing their own corn and investing the time in preparing their own tortillas. In Ixtlan workers at Tortilleria Asunción say they use local corn but produce tortillas that are surprisingly homogenous, considering the diversity of corn grown and the limited production for sale in that area. Other tortillerías buy nixtamal flour and from MASECA but not from a place or a region nearby. Different to the production of tortillas in farmers' households with the use of the old stone metate or community mills, or neighborhood mechanized tortillerias of nixtamal corn, the process of nixtamal flour production is centralized and involves the use of more sophisticated technology. That process requires the drying, hammer-milling, sifting, and blending of nixtamal (previously ground or just with boiled mix of nixtamal) to produce nixtamal flour (Serna-Saldivar et al. 2001) also called "dried masa flour" or "masa harina". GRUMA, the holding company of the food conglomerate that includes GIMSA and MASECA, concentrates the production process from corn to nixtamal flour for tortillerias, but it also sells tortillas of and nixtamal flour packages at retail stores. Sold as 'instant corn masa flour', maseca nixtamal flour can be used to make tortillas only by mixing it with water.

MASECA, a product of GIMSA (Maseca Industrial Group Corporation), has become a point of reference for processed, quick-making tortilla nixtamal flour. Together, GIMSA and MINSA-Arancia Corn Products International (the second largest producer of nixtamal flour in Mexico) have monopolized the market of nixtamal flour and tortillas,

ever since the government dismantled its institutional and material infrastructure for the distribution of corn, leaving the market to private companies under new conditions of the North American Free Trade Agreement (NAFTA). Now, a majority of Mexicans eat tortillas made with MINSA and MASECA corn industrially grown by producers from Mexico and the United States. GMO corn is present in the loads imported from the US for the production of flour. In total, GIMSA and MINSA-Arancia-Corn Products International as well as Cargill Mexico, Archer Daniels Mindland (ADM) (that owns 22% of GRUMA) and Agroinsa, have taken control of the corn market in Mexico after NAFTA was implemented (García and Keleman 2007). In the nine years "between 1993 and 2004, the level of production concentrated among the major plants of this industry [owned by those corporations] increased from 48 per cent to 92 per cent" (Keleman, Garcia, and Hellin 2009, p.191) in Mexico.

Because corn is the most important food staple in Mexico and tortillas the most common form in which it is consumed nationwide, this monopoly represents a concern for many Mexicans and a reason for the calls for protecting Mexican food sovereignty. In that context of concerns (including concerns for the potential introduction of GMO corn) also the tortilla crisis motivated discussions of the need for declaring it a national patrimony and registering it on the UNESCO list of world heritage (Fragua 2008). In 2005, the Mexican government had already requested the UNESCO to include their traditional cuisine in the list of the intangible cultural heritage of humanity but it was rejected (Cruz 2005, Pilcher 2008). Only recently, in November 2010, the UNESCO added the traditional Mexican cuisine, including traditional made tortillas, in its Representative List of the Intangible Cultural Heritage of Humanity (UNESCO 2010a).

Other Mexican traditions included in that list in previous years were the indigenous festivity dedicated to the dead, and the ritual ceremony of the voladores. In November 2010, the "gastronomic meal of the French" was also included in that list.[61]

In response to those long time concerns about food sovereignty in Mexico, corporations controlling the corn market became involved in the [re]production of discourses that connect themes of tradition and identity related to this food staple to their own work as nixtamal flour makers. In these discourses, MASECA, for example, states that it plays an important role in the maintenance of the tortilla tradition in a modernized Mexico. By doing that, however, they not only situate themselves as leaders of a process of tortilla production modernization, but also attempt to naturalize particular ways of imagining the world and the nation in which neoliberal values are stabilized. The discourses in which they build this identity tell a history of corn in which the material and political processes that enable them to lead the tortilla and corn market in Mexico are forgotten. What they engage in, I argue, is corporate memorialization, a production of memories that leaves out narratives of social struggles.

As examples of this corporate memorialization, I analyze below significant self-representations made by MASECA-GRUMA, the major player in the market of nixtamal flour. As a counterpoint, I also discuss the claims made by a small-scale tortilla maker from Oaxaca, the tortilleria Itanoni. This tortilleria became popular after the discovery of GMO contamination of corn in Oaxaca, due to its specialization in gourmet tortillas made, as the owners claim, with native corn. Their tortillas made with different corn varieties

[61] In 2010 the UNESCO also included in that list "The gastronomic meal of the French" defined as "a customary social practice for celebrating important moments in the lives of individuals and groups, such as births, weddings, birthdays, anniversaries, achievements and reunions. It is a festive meal bringing people together for an occasion to enjoy the art of good eating and drinking". (UNESCO 2010b).

and their narratives that highlight their work as respecting and rescuing corn diversity and culture are central assets of their product brand and a reason for their popularity among a segment of the Oaxacan population and tourists in that city. Both MASECA and Itanoni, with projects of different scale, remember the history of corn and the tortilla as a way of constructing a present in which their own business purposes are legitimated. By doing that, they also attempt to bring about different imaginaries of global interconnections in which their role is a key element in the subsistence of Mexican tradition and identity. In particular, MASECA memorializes a history of the tortilla that wishes to remember its own entrepreneurial success while forgetting the actual favorable (to its business aspirations) political and material work[62] that enabled the implementation of neoliberal policies in Mexico and its control of the tortilla market. Itanoni however, makes its cause the culinary response to a threat of homogenizing corn that represents a change in people's lives brought to them [Mexicans] by forms of interacting with people and the world that, according to the restaurant, are foreign to their roots.

1. Memorializing to Forget

In Yavesia, people only receive TV via cable but their programs and signal come from Mexico City and Veracruz instead of Oaxaca. Sitting in front of the TV after working hours on their milpas, Yavesia farmers, like all Mexican audiences, rural and urban, watch, in between news programs, soap operas, and TV contest shows, several minutes of advertising, including TV spots of corn-processed products, such as those of MASECA. In each commercial, this company appeals to the Mexican origin of corn, to the nativity of its corn and its connection to Mexican national identity. It presents

[62] Such as policies that weakening competition in the tortilla market.

different situations on their various TV spots, but each shares the same ideas and the slogan that defines MASECA as "el maiz de esta tierra" (the corn of this land).[63] One of their ads that more explicitly speaks of that national connection of MASECA with a glorified Mexican pre-Hispanic history presents a woman in an old tortilleria, with low indoor light, drawing figures with MASECA flour spilled on a table[64]. With the soft melody of a Spanish acoustic guitar and trumpets of mariachi rhythm in the background, the woman smiles in an atmosphere of nostalgia, while drawing with her hands in the flour first a pre-Hispanic pyramid and then a Quetzalcoatl, the mythical feathered serpent god of the Nahuas who gave corn to the inhabitants of the earth. While these images are shown, a lower small caption in the screen reads "tortillas are nutritious". Then, when the spot shows Quetzalcoatl's head and the pyramid drawn in nixtamal flour in the foreground, a voice-over says to the audience: "Each package of MASECA brings within all the flavor of Mexico." It concludes by saying: "Maseca, the corn of this land".[65] Maseca as the "flavor of Mexico" and its nixtamal flour as the "corn of this land" are messages repeated in the advertisement of GRUMA's products.

The flavor of Mexico associated in this spot with icons of Nahua pre-Hispanic history -seasoned with the sounds of European musical instruments-, connects an imagined past in which corn was given to humans to a present time in which nixtamal flour is packaged by MASECA. The origin of corn as suggested in this and other advertisements of MASECA occurred in Mexican lands by divine intervention and without indication of human action in plant domestication. The role of indigenous people,

[63] MASECA also has similar advertisement with the same slogan in countries of Central America, where the product is available and corn is also consumed in multiple forms.
[64] http://www.flickr.com/photos/joseperaltao/5194728993/
[65] *"cada empaque de maseca lleva por dentro todo el sabor de Mexico. Maseca, el maiz de esta tierra"*

among them Nahua farmers, in creating corn and maintaining its genetic diversity in milpas (in situ) is omitted[66]. Moreover, their insistence on portraying Maseca tortillas as representative of the flavor of Mexico not only refers to an imagined national identity rooted in an old tortilla making tradition but also is an attempt to reinforce the acceptance of this product in the taste of customers that recognize the differences in texture and flavors between industrialized nixtamal flour tortillas and tortillas made with fresh corn. This ludic use of nixtamal flour in that nostalgic environment however lead us to forget that old tortillerias did not make tortillas with flour but with corn itself. Flour is used in the commercial as the material to draw images recalling memories of a Mexican past in same way that MASECA turns tortillas into artifacts to speak of tradition, no matter if they are not made with corn but flour.

In similar fashion, GRUMA connects itself to Mexico's mythic past in a recent thirty second animation of the myth of Quetzalcoatl bringing corn to humans, run on the occasion of the 200th celebration of Mexican national independence[67]. This story also flows from a local origin myth of corn to a present, global entrepreneurial success story created by GRUMA, self described as a "global company of food, proudly Mexican," that "nourishes the heart of Mexico and the World." (Gruma 2010) This commercial starts with a caption that reads: "The legend of Quetzalcoatl, the God that gave us maize", while an indigenous flute is played in the background. Then a voice-over goes on to say: "According to the legend, a feathered serpent came down from the sky to help humanity and to put its future on a grain of corn". The animation shows the serpent-god descending to earth and taking the form of an ant as soon as it reaches the ground. This ant is then

[66] The importance of the involvement of farmers in the development of corn is frequently used by corn activists working in defense of Mexican food sovereignty.
[67] http://www.flickr.com/photos/joseperaltao/5195326878/

seen stumbling over a mountainous landscape, (avoiding difficulties in its route) while the voice-over narrates: " Because we were made of corn and because in it are inscribed our value/braveness, our glory, and our greatness." As the voice over speaks, the ant/god Quetzalcoatl is shown on a hill with a top-down view of his destination: a valley where he finally finds a corn plant and takes a grain from it. The voice-over continues saying: "Viva the people of corn, the hard worker, invincible, that always gives [/works] more." The ant that took the grain from a corn plant gives it to a human hand with dark skin. In the exact moment the grain touches the opened palm of the voice over begins again saying: "Today GRUMA, the global food company that is proudly Mexican, joins the celebration of Mexico's two hundred years of freedom."
Simultaneously, a panoramic view of a landscape with a monoculture cornfield opens up between the mountains and Quetzalcoatl flies into the skies, to roll in his body to give shape to an emblem that includes the colors of the Mexican flag at the end. A final captions reads: "GRUMA, the company that nourishes the heart of Mexico and the world." A similar message is also provided in other ads and on an animated banner on GRUMA's website.

In this representation of the myth of Quetzalcoatl not only does GRUMA represents the time in which corn is given to Mexicans, it also subtly places itself on the role of provider of corn to all of humanity in the present. In the spot, when humans receive the grain of corn from the god Quetzalcoatl, the voice-over does not speak about the image shown on the video: an important mythical event that refers to Mexican's access to their main food staple, Rather, it talks about GRUMA in the present. The two words that sound in that mythical moment are "today, GRUMA." And the image as it is

portrayed in the commercial, -the top-down movement of giving corn to the open up palm- also bring to mind the idea of an act of philanthropy.

This celebratory and colorful commercial lasts only half a minute but it is repeated frequently on Mexican TV. The message appeals to icons of Mexican identity and pride in the context of a narrative well-known by the audience. However, visual and sound elements subtly situate GRUMA as part of that history. It is not only the hand of a human that receives corn in a scene that resembles a time in the past, but GRUMA itself is also entrusted with the responsibility of feeding people with corn. As an indigenous hand receives the corn seed, the voice-over describes the present entrenched in the image of the mythic past portrayed in the video. Thus, the serpent-god giving corn to the indigenous farmers is now subtly compared to GRUMA providing Mexicans --and the World—with tortillas. Moreover, the commercial recall the present and past in the context of the bicentennial commemoration of the Mexican independence. GRUMA expression of pride in being a Mexican company serves as a call for Mexicans pride in the company's global achievement. The statement also displays a realization of achieving a status as Mexican and global at the same time. The sources of pride are this corporation's entrepreneurial style and the flavor of MASECA, not the tortilla itself but of its global reach. The role of that position as Mexican and global, a source of pride, is stated in the final captions through a reassertion of the core of the spot: that now GRUMA is in charge of nourishing the hearts of Mexicans and the world.

By putting themselves in the axis of mythic history and modernity, GRUMA's entrepreneurial venture is stabilized. The naturalization of that success does not leave room for questioning the material means that enabled it. Its representation of the history

of corn leaves out indigenous and small-scale corn farmers as protagonists of that ancient past and forgets the political work that enabled its control of the tortilla market.

A similar narrative is displayed by GRUMA in different venues, providing information that situates itself in the history of the tortilla. GRUMA's website and the Mission Tortilla Factory in California are probably the more explicit scenarios in which GRUMA locates itself as an important actor and a new leader in the history and tradition of tortilla making. On the website of "Azteca milling" GRUMA reproduces the history of tortilla, dividing it into three stages: the first one before nixtamalization[68], the second a stage after the discovery of nixtamalization, and the third, present stage, that began after 5000 years in which the "process remained the same" (Gruma 2009). This third stage, they argue, began in 1949 when Roberto Gonzalez Barreda, the founder of GRUMA, modernized nixtamalization by creating "the first corn masa flour brand in Mexico" (Gruma 2009)[69]. This same history is repeated in the Mission Tortilla Factory house at Disney's California Adventure Park, situating GRUMA products as the modern outcome of tortilla history. While Mission tortilla is a GRUMA product for consumers in the US market and the display at the Mission Tortilla Factory house is intended for tourists visiting California, the history represented is also an attempt to reaffirm GRUMA's identity as responsible not only for the modernization of tortilla making but also for improving the world access to tortillas in their diet. This is a recurrent message also found in previously cited commercials that state the purpose of GRUMA to be to "nourish the heart of Mexico and the World." (Gruma 2010)

[68] The process that, by adding lime, soften corn and permit the digestion of more nutrients.
[69] However, Pilcher (1998) points out that Luis Romero patented technology for the production of tortilla flour in 1912, three decades before Roberto Gonzalez invention.

Visitors to the Mission Tortilla Factory witness a history of the tortilla told with videos and dioramas representing snapshots of non-industrialized ways of preparing tortillas. As visitors walk through the museum like environment of the Mission Tortilla Factory, they see representation of indigenous Mexicans and mestizos preparing tortillas. Animated scenes of rustic kitchens where tortillas are hand-made demonstrate a slow tortilla making process that is construed to represent a past time. In clear contrast with these representations, the visit to the Factory ends on a room filled with silver shiny metal machines that make homogeneously perfect tortillas. On the final stop, a counter is the space where visitors can taste tortillas just out of the assembly line.

The Tortilla Factory house tells us about a history of the tortilla in which it clearly situates GRUMA technologies and nixtamal flour products as the outcome of progress in tortilla making. The name "Mission" itself refers not to the tradition of indigenous food making or knowledge but to the Christianizing role of the Spanish conquerors: the religious enterprise of improving the lives and saving the souls of the indigenous pagan inhabitants of the Americas centuries ago[70]. Curiously, that role of christianizers/civilizers recalled by the name of their packaged tortillas entering into the US market seems to be equated, as represented in the tortilla factory, by the role of the tortilla-making company: GRUMA is the modernizer of traditional techniques of tortilla making to ensure the nourishment of people's hearts in Mexico and the world. However, as Lind and Barham explain, the tortilla factory at Disney's California Adventure is only "one way of knowing the modern tortilla, but there is another side to the story" (2004, p.57) The actual operation of the assembly line involved in the industrial making of

[70] However, Pilcher (1998) tells us that history of colonization involved attempts of replacing corn by wheat in the indigenous diet. Only in the 1940s, the same decade of the birth of Maseca, tortillas gained acceptance among Mexican bourgeoisie.

tortillas carries with it workers' injuries; rushes and burns due to the temperature and the speed of the production line such as in the case of the Azteca tortilla factory in Chicago[71] (Lind and Barham 2004). The aestheticized and septic Disney-like representation of the modern tortilla factory is distant by far from the processes having taking place behind the walls of the tortilla factory.

2. Another side of the story

GIMSA (Grupo Industrial Maseca corporation) is a company of GRUMA (Grupo Maseca) but they all are better known in the streets and countryside of Mexico simply as MASECA. This corporation has grown and achieved its entrepreneurial success not only due to its ability to conduct business and the quality of its products (that significantly reduced the tortilla preparation time) but also due to the roles it played in the early 1990's arena of the economic deregulation of the food market required by the NAFTA and in the conditions generated in Mexico via special protections implemented to ease the transition of the corn agricultural sector to a free market economy (de Ita 2008).

Originally named Molinos Azteca Corporation in 1949, MASECA started to produce nixtamal flour in a time in which Mexican bourgeoisie started to value the good qualities of tortillas as a staple food. During the previous centuries, before and even after the Mexican revolution, the tortilla as the main item on indigenous diet was pointed by the ruling class as the reason of rural population backwardness. Historian Jeffrey Pilcher (1998) explains that "tortilla discourse" shared by earlier nutritionists and the Mexican elite provided new arguments for a persistent attempt to substitute corn with wheat as a means of promoting progress in the countryside. As Pilcher explains, that discourse was

[71] This Chicago factory is not a property of Azteca Milling (MASECA) but of Azteca Foods, a different corporation that produces tortillas for the US market.

instrumental to shift the attention of the authorities concerned by the problems of rural population, from solving the unequal access to land and resources, to a nutritionist rhetoric that blamed indigenous traditions and diet for their condition of abandonment. By the 1940s, scientific nutritional studies debunked prejudges about the corn limited nutritional value (Pilcher 1998). Mills for the mechanical production of nixtamal dough already available at that time (but with limited acceptance) were the outcome of the industrial development of previous decades. If mills simplified the process of tortilla production by eliminating the tedious task of grinding nixtamal manually, nixtamal flour seemed to offer a means to reduce even more the time of production.

As Pilcher (1998) points out, not the elimination of corn but the commodification of it became a way of incorporating the campesino in the life of national economy by fracturing communal food self-reliance based in local production of corn food. Furthermore, Maseca's development of its Tortec t-600 machine in the 1960s made possible for this company to produce 600 tortillas per minute out of nixtamal flour and water without the use of mills[72]. However, this company saw in the Mexican government control of tortilla prices an unfavorable environment for the economic success of the t-600 operation and moved this industry for the first time to El Monte, California in the United States during the early 1970s (Ortiz, Romero, and Diaz 2010). In California they operated under the name of Electra Food Machine Co., company bought by Roberto Gonzalez and found a main market for their production not in Mexico but in Costa Rica (Ortiz, Romero, and Diaz 2010). José Maria Figueres, president of Costa Rica welcomed Maseca tortillas as a means of recovering a traditional diet based on corn that according

[72] As I discuss later in this chapter, this development and the consequent exclusion of millers in the tortilla production process was one of the reason for the protests having place during the Tortilla Wars of the early nineties.

to Ortiz et al. Costa Ricans had almost lost due to the introduction of wheat (2010). However, what motivated the migration of the t-600 technology overseas during those years was the limited acceptance of those machine made tortillas among Mexican consumers. GRUMA only was able to extensively introduce nixtamal flour tortillas in Mexico only after the implementation of market conditions pursuing a neoliberal vision for the Mexican economy, a context that was not favorable to producers of nixtamal corn tortilla and to consumers.

During the 1990s MASECA like a few corporations benefited from the Secretary of Agriculture's "Programs of direct support for the surplus of commercialization" (Programas de apoyo directo para el excedente de comercializacion). This program provided subsidies in Mexico to promote the commercialization of national grain production (De Ita 2008). That program boosted the agro-industrialized production of corn in Northern Mexico, region that had already increased the monoculture production of corn since the 1960s with the arrival of the green revolution technologies. However, at the same time, these same corporations such as MASECA that were benefiting from Mexican subsidies were also the major importers bringing corn from the United States to the Mexican market under price of dumping (De Ita 2008, Espinosa 1995). Their imports of US corn, De Ita explains, were not motivated by a limited Mexican production or a better price found in the United States but because the US government also established programs to promote agricultural exports through the Commodity Credit Corporation, with long term, soft credits. The importation of US corn itself became a profitable financial operation (De Ita 2000, 2008) and MASECA took advantage of the economic stimulus on both sides of the border. While in Mexico corn was protected to ease the

transition of farmers to the conditions of the full implementation of NAFTA, in practice the action of the major players in the corn market reduced the effectiveness of those protections for this sector. In this context of financial speculation with subsidies and credits from the USA and Mexico, MASECA increased its power for political leverage in Mexico while strengthening its control of the tortilla market.

The history of the tortilla told by MASECA stabilizes as natural and positive transition from the nixtamal corn tortilla (made with boiled corn grains and lime) to the tortilla made with nixtamal flour. This transformation, called flourization (harinización), however, didn't occur without the imposition of new standards and the resistance of tortilleros and millers, most of them small-scale producers. MASECA accounts memorialize a tortilla history that induces us to forget the fact that the flourization of Mexican meals was carved in the flame of intense resistance know as the "tortilla wars". These struggles took place in the early 1990s during the Salinas de Gortari government. Those battles are not described in the ingenuous accounts of tortilla history pervasively displayed by MASECA. MASECA (with 78% of the nixtamal flour market) and the other corn producer companies, MICONSA (later called MINSA after privatization in 1993), and Agroinsa, made their goal to introduce and extensively promote Mexican consumption of nixtamal flour. They were supported in this endeavor by the Mexican government's implementation of policies that affected the interest of millers and tortilleros who produced tortilla with nixtamal. If before the 1990s corn tortilla producers ensured their production of inexpensive tortillas via subsidies from the federal government, the government of Salinas de Gortari (1988 -1994) accelerated a deregulatory process (that started with the structural adjustment policies of the 1980s)

that increased the price of corn for tortilleros but maintained and enforced a low price of the tortilla for consumers[73]. During that time, flour producers such as MASECA implemented a campaign to sell policy makers and the public the idea that a transition to a flour tortilla production and consumption in Mexico was not only inevitable but also the most efficient way of using and reducing subsidies (Espinosa 1995). This campaign took place in the context of extended rumors about tortilleros's and millers's illegal use of subsidies given by the federal government to the corn industry since 1973.

Among these deregulatory policies, in 1990, subsidies of the price of corn bought by millers and tortilleros were transferred through CONASUPO directly to the "target population," low income families that received tortilla coupons valid for a free kilo of tortilla per day (Espinosa 1995). This approach divided consumers and small tortilla producers with respect to the provisions given by the government. Contradictorily, the subsidies for the flour industry doubled between 1991 and 1993 (Espinosa 1995)[74]. Moreover, at that early time, CONASUPO's monopoly on the importation of corn was fractured by a permission granted by the government to MASECA allowing it to buy corn from the US (Cortez and Diaz 2005). This was a major change in a time in which the US price of corn was significantly lower than that of the corn produced in Mexico. This permission, however, was not granted to millers and tortilleros but only to flour tortilla producers (Cortez and Diaz 2005). Simultaneously, PROFECO (Procuradoria Federal del

[73] According to Di Palma (1996), the long term friendship of Roberto Gonzalez Barrera, owner of MASECA (known as the king of tortillas) with Carlos Salinas de Gortari, Mexican president had also an impact on the implementation of policies that defined the future of the tortilla market in Mexico. Also, Espinosa mentions that Roberto Gonzalez Barrera was the fellow father in law of Carlos Hank Gonzalez, minister of agriculture during Salinas de Gortari government.

[74] Pilcher (2005) recalls a January 1999 elimination of a tortilla subsidy as a moment in which neighborhood tortillerias began to close. However this process of decline of small tortillerias had already started in the early 1990s with the elimination of subsidies aimed directly to those tortillerias. In 1999 subsidies remained in place in rural areas and cities poorer neighborhoods (La Jornada 1998).

Consumidor), the Mexican federal consumers bureau, forgave the penalties and suspension of licenses to tortillerias committed to the substitution of nixtamal corn dough by nixtamal flour in the elaboration of tortillas (Espinosa 1995). In that climate, tortilleros and millers organized a strike and increased the price of the tortilla without the authorization of the government (Espinosa 1995). As Espinosa explains, the urban population did not visibly resist to the flourization nor support the actions of the union of millers and tortilleros. By 1992, the government response to this conflict was the arrest and incarceration of Nazario Palomera, a leader of the millers and tortilla makers association under charges of "atentar contra la economia pública y las riquezas nacionales", of "putting the public economy and national wealth at risk" (Espinosa 1995, p.71).

Contrasting with the urban population's lack of involvement in these tortilla wars, in rural areas campesino farmers engaged in resistance since they understood flourization as an inconvenient transition that reduced the multiple uses they make of corn grains. Aside from being a central input for tortilla making, corn grains are used as medicine, seed, and animal food (Espinosa 1995). The idea of future in which affordable corn is substituted by flour was inacceptable. While most campesinos have their own cornfields to provide for their family's consumption, they rarely achieve complete self-sufficiency throughout the year and on occasion buy it from neighbors or from Dicconsa the state-managed rural food staple stores. The partial substitution of grain by flour in Dicconsa stores was met in the countryside with protests, petition letters to the government, and campesino activism to achieve regional self-sufficiency in the provision of corn grains (Espinosa 1995). The perception of the flourization in the countryside was stated by

campesinos who said: “Ni modo que ahora coman polvo”, “ [with sarcasm] No way will our animals will now eat dust”, or “las tortillas de harina no nos gustan, las de grano sí, porque para nosotros, la tortilla sirve para el taco, pero también es la cuchara”, We don’t like flour tortillas but we like those made with grain, because we use tortillas to make tacos but tortillas are also spoons [for us].” (Espinosa 1995, p.73). During the next years, Dicconsa still was selling corn grain but in many cases, this corn was of lower quality than the one produced locally and was brought from the US. That was the case of the Dicconsa store in Capulalpam during the time in which milpas were found contaminated with GMO in the Sierra Juarez of Oaxaca.

This tortilla war also took place in the arena of the representation of flour versus nixtamal tortillas. In the early nineties, millers and tortilleros argued that flour tortillas such as those produced by MASECA had less nutritional value because of their lower content of fiber and calcium and the loss of proteins during the industrial. Pilcher also points out that in that time the Asociation of Proprietors of Tortilla Factories and Nixtamal Mills cited scientific research supporting the idea “that traditional tortillas were more nutritive than those made with Maseca, which they dubbed MAsaSECA (“dry Masa”) (2006, p.72). Moreover, millers and tortilleros explained that the flourization of Mexico would also cause a loss of jobs within their productive sector and would put at risk Mexican food sovereignty (Massieu and Lechuga 2002). While the tortilla market by now is under the control of nixtamal flour producers such as MASECA, this battleground has not been abandoned. The reduced nutritional value of the flour tortilla is sustained by Mexican intellectuals such as Cristina Barros y Marco Buenrostro who explain that the industrial process of nixtamalization in the production of nixtamal flour, is incomplete

since it does not provide many nutrients and proteins found in tortillas made with nixtamalized fresh corn through less industrialized means (2005). Facing those critiques, MASECA continues to repeat slogans highlighting the nutritional value of their tortillas in their advertisement. During the 1990s' tortilla wars however, flour tortilla companies also responded to their critics by representing their products as more hygienic and ecological than those made at small scale tortillerias, neighborhood family stores where it was common to actually see the tortillero in the process of making tortilla dough. The industrial production of MASECA nixtamal flour is not only highly mechanized but also happens out of the visible range of the customers, behind the walls of the factories. The mechanization applied by MASECA's industrial methods was presented in a positive light by tortilla flour companies that explain it to be a reason for achieving higher hygienic standards. Flour tortilla companies also portrayed themselves as more environmentally friendly by contrasting their industrial methods with the representations they made of millers and tortilleros' extensive use of gas and water as ecologically inefficient (Massieu 2002).

The transformation experienced in the tortilla market was accompanied by a technological transformation of the small scale tortillerias used to produce tortillas with grains instead of flour. MASECA offered those tortillerias appropriate machinery and supplies for this transformation nationwide (Di Palma 1996). Higher efficiency, hygiene and lower costs of production of nixtamal flour tortillas, were criteria to introduce that machinery for the substitution of fresh nixtamal tortilla corn.

By the late nineties, the tortilla market ended up in control of the two nixtamal flour producers, MASECA and MINSA[75], and a Mexican dramatic transformation took place in the material forms of preparing tortillas and in everyday meals of the urban Mexican population. The final dismantling of CONASUPO in 1999 (besides that year elimination of tortilla subsidies) gave MASECA and MINSA advantage in influencing the price of the tortilla without the intervention of the state. CONASUPO was a state institution responsible for buying Mexican farmers's production of staple foods at a fixed price and ensured the supply for customers nationwide as a system of redistribution[76]. However, this scheme of small scale-farming of corn supported by CONASUPO was targeted under the new regime's deregulatory measures and state reduction. Within the NAFTA framework, the production of corn at that scale was perceived to be uncompetitive in the face of the US market. As Ochoa tells us, (2000, p273) on the eve of the implementation of NAFTA, Mexican analysts foresaw a radical transformation of the Mexican countryside once the corn prices were liberalized. Substitution of corn by more competitive crops and the migration of farmers to more industrialized areas were the expected changes[77]. The elimination of CONASUPO was a step in the materialization of a vision that surrendered those "small scale producers into the hands of a reduced number

[75] This second company received technological support from MASECA when it was a state-owned industry, a time in which flour tortillas were not still extensively consumed.

[76] Until 1990, that state-owned institution controlled the Mexican staple food market and had a fundamental role in the survival of farmers practicing small scale agriculture in Mexico; 85% of the them with less than 5 hectares (12.5 acres) of farmland were corn growers (De Ita 2007)

[77] By 2010, farmers have massively abandoned rural areas but corn hasn't been substituted with other crops. Agricultural technicians working for the government and micro-credit NGOs still try to convince farmers to use their lands in crops and activities they consider more profitable. However, contrary to the expectations of the government, the liberalization of other crops and the protection regime given to corn to easy the transition increased the production of this crop in Mexico, specially in the Northwest states. From 1989 to 1993 the production of corn increased in 65% from 11 millions of tons to 18.1 millions. And during the period of NAFTA it stayed over 20 millions of tons. De Ita called this phenomena the maizification of Mexican agriculture (2007), that later made even more difficult the transition to a deregulated economy.

of transnational corporations as the only buyers of their crops: MASECA, MINSA, Cargill, Arancia and Archer Daniels Midland (ADM). These same corporations were also the main exporters in the United States. Cargill, ADM and Zen Noh control 81% of US corn exports (Howard 2003). In 2001, only MASECA imported most of the 11% of the 6.1 million tons of corn aimed to the Mexican flour sector (De Ita 2007). Despite those predictions and unfavorable conditions, small-scale farmers did not stop growing corn. Contrary to policy makers' expectations, remittances sent by farmers who emigrated to more industrialized areas of Mexico and the United States were used by their families in the countryside to maintain their milpas even when growing corn was not a profitable activity. As Barkin (2001) explains, farmers are "fully aware of the financial 'irrationality' of this behavior" (2002, p.82) but still apply that income earned out of their communities to maintain their traditional agriculture systems at home.

In 2006, Jesus Leon Santos, coordinator of CEDICAM (the Center for Integral Small Farmer Development in the Mixteca) told me in Nochixtlan, a region of Oaxaca, that farmers he works with were wondering about the effects of the recent high increase of international prices of corn on their income. "Are we going to sell our corn at a better price?" he asked me with certain anticipation and reflecting the optimism of corn farmers in that area of the Mixteca. I did not have any answer at that time but it didn't take us too long to realize that those changes in the corn market, as Bello explains, do "not translate into significantly higher prices paid to small producers at the local level" (2008, p.16). Mixteca farmers, like most Mexican small-scale farmers, did not benefit from the rise of food-crop prices that marked the crisis that year and subsequent years. The monopoly that a few companies such as Cargill and MASECA hold over the distribution of imported US

grain and Mexican corn, Bello (2008) explains, gave them the power to speculate at a national level in the corn trade market and prevent a rise in the price locally.

The first days of 2007, a year before the full application of NAFTA and the elimination of all trade protections to Mexican corn, came with a steep increase in the tortilla prices. The prices went from 6 to 7 pesos to 12 pesos. The Mexican president's immediate response was to raise the quota of US corn importation free of tariffs, and agreed in a meeting with major players in the tortilla market, MASECA, MINSA, and leaders of a sector of millers and tortilla makers, to maintain a tortilla maximum price of 8.5 pesos per kilo. Other companies that attended the meeting such as Walmart agreed to maintain the previous tortilla price of under 6 pesos per kilo.

Later that same year, MASECA as well as Cargill, MINSA, and ADM received a subsidy of 625 pesos per ton of corn bought[78]. This governmental program ensured the purchase of 3.85 million tons of corn produced in the northwest state of Sinaloa during the fall and winter of 2007-2008. "This subvention was supposed to help with cost of transportation of grains to the consumption regions, storage, financial costs, costs of exportation, plus a subsidy of 200 pesos if the grain was for animal consumption. [Taking advantage of those subventions] MASECA bought 922,000 tons, Cargill 900,000, MINSA 317,000, and ADM financially linked to MASECA bought 86,000 tons of corn" (De Ita 2007). The benefit for these companies became more evident months later, when the government agreed to a staggered increase of the corn selling-price from 3,450 pesos in July to 3,950 pesos in November. That measure left room for speculation on the corn market and impacted the economy of 60,000 mills, most of them small family business

[78] Programa de Compra Anticipada de Maíz Blanco.

that still make dough and tortillas in Mexico. Due to the scale of these small mills it was impossible for their owners to benefit from programs of anticipated purchase and hence they had to rely on corn stored and provided by the few corporations that buy it massively (De Ita 2007).

The globalization of the MASECA tortilla required a two-fold strategy within Mexico, flourization and corporate memorialization. Flourization is not only the technical process by which the industry turns corn grain into corn powder behind the walls of the factory, but also the transformation at large, the processes that happen[ed] behind doors in the formation of new [de]regulations, and the dosification, the dispensation of measures to access (and rule out) food and markets on targeted populations. This process does not exclude the use of sovereign power for the enforcement of the new corn regime. Like in the times of tortilla wars, resistance in the streets, mills, and markets has also been criminalized and penalized. The new regime implemented is felt in cornfields, factories, tortillerias, markets, and meals.

Flourization as a material transformation, is an intervention in the form of corn that makes it - as powder- a more malleable substance for industrial production. This transformation enhances its potential for circulation, transportation, and commercialization (enabled by deregulations), but it first dissolves its origin since corn grains from different locations, from North and/or South are mixed together indistinctly for the production of flour. The borders of their origin are vanish in the process of drying, hammer-milling, sifting, and blending. The new powder form of corn appears to conceal

the connections between the grains and the people and territories where they were produced.[79]

This material flexibility also makes the work in the tortilla production process more taylorizable and while the flour production is concentrated where the industrial transformation plants are, the tortillerias engaged in the production of nixtamal flour tortillas are dispersed nationwide and internationally. MASECA made possible the creation of new circuits for the flow of flour not only by the implementation of transformations in factories but also by offering credits to small scale tortilleros "to upgrade their equipment" (Malkin 1998).

These new networks and conditions of production made possible in the early nineties an imbalance favorable to the nixtamal flour industry: even the smallest flour factories were able to produce 15 tons of tortillas per day while tortilleros of nixtamal corn found it hard to maintain a daily production of 400 kilos (Espinosa 1995). In this context, the business sector and government perceive a transition from nixtamal corn to flour as modernization and traditional tortilla makers such as Tomas Puebla Salazar start to think of more elaborated nixtamal corn tortillas as an "specialty" for upscale customers (Malkin 1998).

Campesinos' expressions of concern about flourization however reveal that it not only operates as the unfolding of financial and material flexibility but that it has also

[79] Mexicans are aware of the silences of powder when recalling the case of powder milk imported from Ireland in 1987, contaminated with radioactivity, a consequence of the accident in Chernobyl. Mexico imported 28,000 tons of powder milk that after entering the country, was discovered to be contaminated with the fission product 137Cs. (Navarrete, J., Martínez, T., and L. Cabrera 2007). One informant in Mexico City, expressed his surprise at that time but powerlessness when told me about that event. Other joked around the idea of the Chilangos (slang for Mexico City inhabitants) ability to survive in the eventual, imagined, scenery of nuclear attack because they not only survived the milk contamination incident but also everyday manage to survive to the air pollution in their city.

another face: rigidity from the perspective of the population in the countryside that make use of corn itself as food, tools, and medicine. Their concerns pose the query: flexibility for whom? In the form of powder, corn serves the purpose of fast production, circulation, and accumulation but by the same token it dispossesses a rural population from traditional practices and communal uses that are at the core of their everyday life. Still, MASECA entrusts itself with the role of continuing and globalizing the Mexican tradition of food.

Flexible accumulation requires dispossession not only of lands and of the labor force, leaving behind cornfields unattended (due to farmers' migration to cities), but also the dispossession of practices and decisions over crops required by campesinos to maintain a degree of self-sufficiency. Farmers are expected to switch to crops following the logic of comparative advantages within the context of NAFTA. As noted in my first chapter, trainers in entrepreneurial skills who frequently offer workshops in the Sierra Juarez perceive the work of farmers on their cornfields as unprofitable and a sign of stubbornness; a backward defiance to the standard criteria of calculability and economic rationality. On this front, however, the remaking of campesino subjectivities according to the imagined fluidity of global capital and economic drive is to some extent subverted by the remittances of immigrant workers applied by their families to the maintenance of milpas. That resistance is also an effort for maintaining socio-material assemblages of corn and human relations threatened by the pervasive move toward the stabilization of the neoliberal order.

Flourization as a broader change also requires the normalization of the new corn regime[80]. The struggles brought by the importation of cheaper corn, by the transformation of corn into powder, and, ultimately, the means for the concentration of power over the most important staple food market in Mexico are concealed by the flour industry's re-writing of and remembering corn and tortilla history. I call this process corporate memorialization, consisting of business motivated material practices such as performances and the circulation of images "by which history is turned into memory" (Olson, Finnegan & Hope, 2008, p.99). This is an attempt to influence public memory - "a shared sense of the past, fashioned from the symbolic resources of community" (Browne, 1995, p.243)- with the purpose of bringing forth the modernizing role of MASECA, along with nixtamal flour, in the history of the tortilla. This strategy leaves out the narratives of farmers, consumers, tortilleros, and millers that were hurt by the expansion of the flour tortilla market in Mexico. Memorializing to forget is a key element in the transition from the flesh of [the people of] corn to flour, a transition in which companies present the diet and the economies of nixtamal flour tortilla as a normal outcome of Mexican food history. This corporate memorialization is also necessary for the displacement of a thick understanding of corn culture (related to collective culinary and agricultural practices and identities) by thin identities surrendered to the conditions required for massive production and global circulation of tortillas made by the flour industry. This was/is first a strategy to give flour tortillas a space in the collective imaginary of national staple foods. MASECA's corporate memorialization aims at reforming the collective memory of corn culture by discursively connecting thick

[80] Fitting coined the term "neoliberal corn regime to refer to the series of recent policies associated with the ideology of neoliberal glob- alization, including NAFTA, which prioritize market liberalization, trade, agricultural ''efficiency,'' and the reduction of state services over domestic corn production" (2006, p.16).

identities, "the felt, lived, embodied experience of belonging to a collective" (Gille 2010, p.24), to its product -as self proclaimed outcome of the convergence of tradition and modernization of tortillas. In practice, this transition involves the operationalization of the value of the tortilla within a limited set of qualities, related more to perceived nutritional value, price, and availability as an outcome of advertisement and the material malleability of the product itself. This change is also made possible in a national context of increasing corporate political power, economic crisis, and perceived scarcity; a context that also served to justify the implementation of structural adjustment policies and the North American Free Trade Agreement.

In this transition, at the same time, the business corporation reproduces not only itself as an institution with a stake in the production of culture, social relations and history but also the market as "the most powerful postnational or cosmopolitan social imaginary" (Calhoun, 2005, p.279). However, in the face of the constitution of a Mexican neoliberal social imaginary as hegemonic, some groups take action by articulating responses that express different forms of understanding of the public sphere and the world of social relations. These are alternative socio-material assemblages that, for example, members of the "Network in Defense of Corn[81]" recall as a means to achieve social justice and confront the neoliberalization of Mexico. Their claims center on the need for respecting, supporting, and extending indigenous values of working with and sharing corn, and on indigenous communities' aspirations of self-sufficiency and their understanding of corn not only as food but also as the axis of campesino culture and as a living being with spiritual value. Below, I discuss the response of Itanoni, a small scale

[81] CENAMI and UNOSJO but also other collectives such as the Sin Maiz no hay Pais campaign, "Without Corn there is No Country."

tortilleria and restaurant in Oaxaca that presents itself as being part of that alternative by paying attention to the diversity and culture of native corn in the preparation of the food they offer to their customers.

3. Itanoni: Flower of Corn

Itanoni is a tortilleria founded in Oaxaca in 2001. At a small scale, Itanoni specializes in serving fresh corn tortillas that are hand-made with diverse locally grown grains. Situated among residential and business buildings in the colonia Reforma, an upper middle class Oaxacan neighborhood, Itanoni prepares tortillas and appetizers, called antojitos, gourmet snacks oriented to satisfy specific food cravings. As Itanoni explains, their food is made with what they call "corn with identity" that is, as they define it, "in these times of globalization, (...) our root and lighthouse. By showing us [our] origin and identity it orients us to navigate in boisterous rivers of information, [rivers] of thousands of voices and chants that promise us fleeting paradises" (Itanoni 2010).

Like MASECA, but with a different approach, Itanoni imagines itself in the convergence of the forces of a neoliberal globalization that impact people's subjectivities and an ancient tradition of corn. Itanoni highlights corn as the axis of cultural practices they define as essentially Mexican and they call their work of traditional tortilla making a means to [re]connect with their roots and Mexican identity in the face of an aggressive form of globalization. Their creation of various tortilla dishes made with a diversity of native corn varieties that they grow is portrayed as a response to what Itanoni considers to be an homogenizing trend in the world. Their gourmet resistance with delicatessen tortillas and antojitos gives customers the opportunity to find themselves in the flavors of their own tradition and nationality. In that way, Itanoni positions itself with a social role

in a selected segment of the tortilla market of Oaxaca. That identity is seen as having relevant, crucial implications in the cultural scene of Oaxaca and Mexico.

On a normal afternoon, customers can see, in the front patio of the Itanoni tortilleria/restaurant, women employees warming fresh-made tortillas of different flavors and colors on enormous traditional comales, pan surfaces covered with a thin layer of limestone where you can see little balls of already pressed tortilla dough popping softly and gaining their texture. The traditional utensils and the preparation of food in that outdoor space is designed to give customers a "clean atmosphere of rural familiarity" (Itanoni 2010). As with many other restaurants in Oaxaca, Itanoni serves its food in the patios of an old house where customers can distance themselves during the mealtime from the busy pace of the city. Eating tortilla dishes such as quesadillas, tlayudas, and tacos in the urban outdoor spaces however, is a common practice in Oaxaca (and other cities of Mexico), since people usually congregate around street carts specialized on a particular corn food preparation, including hot drinks and tamales, offered at breakfast, lunch, and dinner time. The popularity and quality of street food is demonstrated by the fact that some vendors even attract customers from distant areas of the city during the night, even past midnight. When I asked customers and people in Oaxaca (as well as in Mexico City) who eat from street carts about hygiene, they explained me that cleanliness is not a concern since the food is almost always clean and well made. In an attempt to contrast their offerings with those of the street vendors however, Itanoni speaks of the clean atmosphere in which their service is provided. That strategy recalls the claim of nixtamal flour tortilla producers regarding their standards of hygiene as opposed to the standards of small scale tortilleros. More importantly, however, his restaurant and

tortilleria also defines its food as one that, in contrast with that of street food vendors and most restaurants, provides an experience of "connecting with Mexican roots" for customers that can pay the slightly higher but still affordable price of a "cuisine with identity" made with native corn, presented in a comfortable setting, and with the standards of cleanliness similar to those of the touristic restaurants of Oaxaca city. The cultural roots that Itanoni appeals to are, from their perspective, not found on food from other restaurants or street carts since most of them offer tortillas and corn-food preparations made with MASECA or Minsa flour, which are made of corn from an unknown origin: corn without identity, corn without roots.

In that sense, customers not only eat a good dish that brings to their table and minds a flavor [as offered] of Mexican identity and tradition but also, by buying Itanoni's tortillas, have the additional satisfaction of engaging in a socially responsible behavior. Consuming Itanoni tortillas and antojitos is also a means for customers to support the promotion of locally grown corn, and thus, that preserve the genetic diversity of what is sold as authentically Mexican. In this way customers become participants of an effort to rescue native corn diversity and Mexican roots by buying tortillas that, as Itanoni suggests, also becomes means of responding to the threat of a hegemonic form of globalization.

Because of those characteristics attributed to its products, the discovery of GMO contamination of Oaxacan corn in 2001 brought more public attention to the work done at Itanoni (Ramirez, interview 2008). Not only did more customers go to buy Itanoni's tortillas after the scandal of transgenetic contamination but scholars also started to point out Itanoni's work as an example of gourmet resistance to [neoliberal] globalization

(Poole and Rascon 2009). Amado Ramirez, an agronomist, former professor at the Universidad de Chapingo, consultant, and owner of Itanoni, tells me that such public interest in Itanoni is evidence of the relevance of his work as a tortillero. He points out the amount of information posted online regarding his restaurant as a proof of his success. "I found the right path in my life (...) to be a tortillero" he explains and tells me "look online for Itanoni, Google it, (...) we didn't post most of the information you will find there" with the pride that such interest of others in his work produces (Ramirez, interview 2008). That information, posted by tourism guides, tourists, and customers' blogs give details of the experience of eating at Itanoni and in some cases also repeats Ramirez's explanation of the value of his cuisine with identity and point out that "Itanoni is a restaurant with a philosophy"(Itanoni 2010a). At the same time, the work of a tortillero, a humble occupation in Mexico, is appropriated with sophistication by Ramirez to give his business even more a character of authenticity.

Ramirez also explains that Itanoni is a space in which corn is valued as a living entity and respected in the same way indigenous farmers respect do it in their kitchens and their milpas. On Itanoni's website, a history of corn different from the one told by MASECA, is used to contextualize the role of Itanoni. In that history, corn is a subject that interacts with humans in a process of co-evolution that recalls Haraway's view of the co-constitution of subjects and objects found in companion species. While Haraway finds in her co-interaction with Ms. Cayenne Pepper, her Australian shepherd inspiration to approach what she calls metaplasm "the remodeling of dog and human flesh, remodeling the codes of life, in the history of companion species relating" (Haraway 2003), Ramirez,

at Itanoni speaks of the co-constitutive relationship between humans and corn, a story that underscores the importance of this grain in the formation of Mexican subjects:

> "(...) they said that after humans encountered with corn, (...) here, in the Central Valleys [of Oaxaca], that the maize chose us to enable herself to be born and that we chose her in order to reproduce her and to recreate ourselves. Cf Pollan
> With love, the Teocintle-maize gave us her life, her reproductive capacity, and naked brought together her grains, [and then] covered them with leafs, and [that is how] corn was born [in the past]. Now that corn is protected in leaves we need to caress them and open their leaves to separate their grains, to cook them, to feed us, to live planting them, and to reproduce ourselves.
> She [the corn] taught us about the cycles of nature, the seasons of the year, the moon cycles, the rainy seasons, and taught us about the other plants and animals around us. Our intimate encounters of creation and recreation are: the corn plot and the kitchen; our bed in which we reproduce ourselves and the table where we recreate ourselves by eating". (Itanoni 2010b)

This history continues on a second stage: a time of diversification, and goes on to present a third stage of globalization.

> "After the beginning we continued with our diversification; our [corn's and humans'] act of being together in different time and diverse spaces. We adapted ourselves [corn and humans] to multiple environments and spread our presence on all geographies in coasts, valleys, and mountains. We built a way of living and coexisted, constructed, and developed our form of expressing ourselves, our culture.
> When the ships of men from other continent arrived, they marginalized us. They planted other plants in our best lands and grew other animals. However we (corn and humans) found refuge in rough areas out of the cities and there we continued our lives. We continued diversifying ourselves, reproducing us, cycle after cycle, generation after generation. That is how we continued our existence: our daily life was made of intimacy and familiarity.
> In the kitchens, we not only used to see ourselves but also gave ourselves with different feelings, and in different forms we talk among us and with the others. In the stews, we dialogued with the vegetable and animal world, in the act of cooking. Corn was and is our bone skeleton and foundation. In the *tlayuda* (a large toasted corn tortilla) we put the food on top, in the taco (a small tortilla folded and filled in) we embraced it, in the *memela* (tortilla dough topped with different ingredients) we pinch it to contain it and in the *tetela* we melt it."

Then Itanoni describes a third stage of corn history that they call "the global world":

> "In globalization the spirit speaks through our races:
> In these times of globalization, corn is our root and lighthouse; by showing us [our] origin and identity it orients us to navigate in boisterous rivers of

> information, [rivers] of thousands of voices and chants that promise us fleeting paradises. [voices] that attempt to take us to places and spaces without our consent, to tell us where to go, what to do, and what to be.
> Food, from being the moment of conscious and pleasant re-creation, is transformed with advertisement and the speed up of life into inputs made to mitigate anxieties, and quick appetites. However in the pueblos, food is intimacy, familiarity, identity, and expression of their mountains and river shores. That is how corn gives form to their soft, hard, defined, and involving flavors [and] its elastic and crunchy textures. That is how corn expresses its youth in the tortilla and maturity in the toast[ed tortilla].
> Corn is a survivor of times of forgetting and negations. It is a companion in our destiny. Together we [corn and humans] lived through conquest and colonizations in the past and the present. These times, in which the roads of communication and coming together are multiplied and the universe is more reachable, are times in which we have to collect the forgotten grains. These grains have been spread on extensive lands over a long period of time. The time to start the return has come. We can come back together: Humans and maize with identity." (Itanoni 2010b)

Different to Maseca's history of corn and the tortilla, Itanoni's account refers to the trauma of colonization and marginalization that this tortilleria points out is still an experience in the present. However they tell us that in the margins, indigenous practices made it possible for corn and their people to subsist by means of the metaplasm of human and corn. In that way, these events of displacement are also portrayed as stimuli for the evolution of corn and human diversity and expansion into new spaces. Neoliberal globalization comes to be situated as part of a continuum of foreign interventions that, in these times, as Itanoni suggests, is also expressed in a transformation of the food of meals into food for fast consumption and alleviation of the psychological distress of the speed-up of life.

In the making of the Itanoni identity, the atmosphere of the restaurant, their cooking tools and techniques, the ingredients, and in particular their corn grains and the forms in which their corn is cultivated are claimed to be traditional. The grains are landrace corn varieties selected by Ramirez in his travels to Oaxacan countryside. The

cornfields are, as Ramirez explains, cultivated by farmers' families under a mediería agreement. The mediería is a rural contract between the owner of a territory and workers who receive an extension of it to cultivate it for a period of time. Itanoni provides its selection of corn seeds to the families of farmers, called medieros, who at the end of the agricultural cycle divide their yields with the restaurant[82]. This medieria enables Itanoni to ensure the provision, prices, and quality of control of the corn used for their tortillas and antojitos. By these means, they control the complete chain of production of their tortillas; from the soil and seeds to their customers' dishes on the restaurant's tables. If Mexican activists opposing the commodified approach to genetic diversity protection of corn in germplasm banks speak of the need for in-situ protection of genetic diversity as a means to empower indigenous farmers, the defense of maize diversity enacted by Itanoni defers/displaces the site of protection from the milpas of indigenous communities to the cornfields of the gourmet entrepreneur. The NGO community and middle class in Oaxaca applaud the creativity and value displayed in Itanoni's initiative. After knowing of my research, contacts and interviewees in Oaxaca city told me: "If you want to know of a gourmet response to the threat against native corn you need to visit Itanoni and talk with Amado Ramirez."

Itanoni has been situated as an alternative: in the margins of the mainstream tortilla business, this tortilleria-restaurant aspires to reenact the space in which diversity of corn can bring about a Mexican identity that connects their customers to their roots. This connection is supposed to guide the community in responding to the negative impact of globalization. For example, in an interview given to the Oaxacan newspaper Despertar,

[82] They are not the families of farmers who developed that specific landrace corn.

Ramirez expressed his concern for the Mexican government's authorization of experimental planting of GMO corn, and said that "the recognition of the value of landraces corn [varieties as well as] its nutritional and cultural importance is the weapon that the Mexican people should have" (Maya 2009). His restaurant work in cooking with Oaxacan landrace corn varieties is presented as a response to that threat. It is not only about consuming locally grown corn but also local landrace varieties those grains that Itanoni managers and consumers see encapsulating the essence of Mexican roots. According to Ramirez, his work at a local level involves also a network of farmers organized in cooperatives of families[83] that cultivate the corn varieties his restaurant uses in its kitchen (Poole and Rascon 2009)[84]. Those farmers however, could be abandoned if the main driving force of Itanoni is put at risk.

In 2006 during the time of the APPO (Popular Assembly of Oaxacan People) protests in Oaxaca city, the Reforma newspaper reported that Itanoni had had to close "because the tourism [to Oaxaca] is about to suffer a shipwreck, not due to [problems with customers'] acceptance of [Itanoni's] concept, (...) we actually were doing pretty well, but because the conflict made our sales collapse (La Reforma 2006). In those days when Itanoni closed, Ramirez was planning to create a tortilla franchise and leave Oaxaca in order to locate his business "in other regions of Mexico, where there is no conflict" (La Reforma 2006). On average, 60 per cent of the customers of Itanoni's locale in downtown Oaxaca were tourists (La Reforma 2006). The APPO movement had started in mid 2006 as a teachers' union strike demanding improvements for their schools and after the state's

[83] In 2008, however Ramirez told me on interview that the farmers families work on his lands. As he expressed farmers were selected based on a chemical, interpersonal connection, that he considers important for establishing that business relationship.

violent repression of teachers' demonstrations, soon became a massive grassroots movement that "wisely refrained from attempting to seize power and has kept as close as possible to the political traditions of Oaxaca's indigenous communities" (Esteva 2007, p.136). Those were days in which the APPO took control of the city downtown however, the protest did not represent an actual threat to tourists but an opportunity for them to be informed about the deficiencies of the state government. Teachers in the plazas informed tourists about their struggles via posters, placards, and flyers translated into different languages. Street vendors were screening documentaries about the state's repression of the APPO in their small battery powered TVs. I remember that summer of 2006 being invited for coffee in the streets of the Oaxacan Zocalo, the main downtown plaza, where teachers and activists were camping out with support of Oaxacan residents who provided them with food and drinks everyday.

Ramirez's decision to close his restaurant while motivated by a lower demand for tortillas, seemed to be aligned with an agreement by Oaxacan businesses supporting the state government. The "cierre ciudadano" (citizens' closed doors) in late September was a 48 hours business strike that was interpreted by the APPO as a boycott of their movement and in support to Ulises Ruiz, state governor at that time (El Norte 2006). Curiously, the APPO movement also shared similar interests with Itanoni for revaluing and recovering indigenous traditions and a need for an alternative to the hegemonic neoliberal order. However the APPO recognized their struggle as a class struggle.

Itanoni's reaction to the crisis in the context of the APPO mobilizations revealed the fragility of the business approach to reterritorializing the circuits of the corn and tortilla market in Oaxaca. It also made explicit Itanoni's dependence on tourists'

consumption instead of on local consumption and on local production of dishes prepared with "corn with identity." Itanoni aspires to have a positive impact by remembering Mexicans' roots through the preparation of tortillas with landrace maize, but their products are mainly provided to upscale consumers: mostly tourists and also upper middle class Oaxacan customers[85]. The imagined social benefits of this strategy ultimately have the form of a promised trickle down of opportunities that would reach other tortilleros, farmers, and the people of Oaxaca in the future. In the actual present however, Itanoni's focus on the ethnic character of its food and project is an expression of a politics of recognition that, as Gille explains, "disguis[es] structural inequalities as difference (...) converting class demands into politically correct, thin cultural claims" (2010, p.27). In that move, the satisfaction of material needs is foreseen as the consequence of an expected recognition of being [with equal rights][86]. Contradictorily, that expectation smoothes the pathway to thinning identities. The appeal of that dream enables a fertile ground for the operationalization of thick identities into a set of features that give shape to what Ramirez called the "concept" that identity is supposed to fill a niche in the market. From that entrepreneurial approach, the particular lived experience and practices that inform a community are valued as a comparative advantage, and the

[85] Morgan, Marsden, and Murdoch call this a "shift from 'traditionalism' to typicality' (2006, p.97). The production and the circuits of food market remain local by selling to tourists instead of exporting the production. An experience of "cultural proximity" instead of "geographical proximity" appears to be more important (Belletti and Marescotti 1997, p.16, mentioned by Morgan Marsden, and Murdoch 2006). The case of Itanoni however is not one of farmers selling their production to tourists but one of a gourmet tortilleria restaurant that depends on customers from out of Oaxaca. Pilcher (2004) provides further examples of Oaxacan business projects with a profile of authenticity managed by foreigners who achieved respect and became "translators" of the indigenous kitchen for culinary tourism. Diana Kennedy, an English woman working with Tausend's Culinary Adventures, and Iliana de la Vega Arnaud, owner of the restaurant El Naranjo.

[86] Gille explains that "just as the recovery of "authentic" or pre-colonial identities is the necessary essentialist move that all postcolonial subjects must adopt in what we might call a Gramscian war of position, so must (...) citizens reach back to thick identities in order to finally become subjects" (2010, p.28)

public sphere that reproduces the community understood as a network of potential customers and labor. Those identities are thus treated instrumentally, as a means to an end in the context of the market.

Itanoni's identity as an alternative producer of tortilla opposed to the conventional ones is probably instrumental to maintain this business niche in the Oaxacan tortilla market. However, by performing their role in the food market as that of the gourmet option and preparing delicatessen food out of landrace maize for the taste of upscale customers they bring together the dichotomies: alternative-conventional and gourmet-staple. By looking in the other, as the mirror of one's own identity, the alternative tortillas (considered by Itanoni as indigenous staple, decades and centuries ago) is turned into specialty food while the industrial tortilla can be seen more clearly as conventional. The collateral effect of this positionality is the reification of conventional tortillas made out of flour by companies like MASECA as the Mexican staple food. In the mirror of the other, these tortillas might not be considered traditional but they are the ones that we find on the table for daily family meals and in the street food carts of Oaxaca. In that dichotomy, they become two sides of the same coin, providing more elements for the stabilization of the neoliberal corn regime.

4. Conclusion

With the transition from a welfare state to a neoliberal regime in the last three decades, Mexico dismantled the structure of subsidies and market regulations that had made it possible for millers and tortilleros to produce and sell affordable nixtamal tortillas made with corn grown by Mexican farmers in Mexico. Both the new economic conditions brought by NAFTA and the policies implemented to ease the transition of

farmers and consumers into the new regime did not favor small farmers and nixtamal corn tortilla producers but the nixtamal flour industry. Flourization and corporate memorialization were strategic steps in materializing and legitimizing the substitution of nixtamal corn tortillas by flour tortillas as the main Mexican food staple. This transition made corn, in the form of powder, a more malleable, circulate-able, storable, and taylorizable material that enabled the industrial production of cheaper tortillas in factories situated far from the areas of corn cultivation in Mexico and other countries. Flexible accumulation through mastering corn as flour, however, is not possible without the adaptability of consumers, and small-scale tortilleros. They were required to upgrade their machinery in order to keep up with the new productive standards. As sold to them, the inevitable pace of progress and globalization had the texture of flour. Flourization is not only powdering corn but also those transformations in the network of tortilla producers achieved by persuasion or coercion. It is involved the transformations in the kitchen and table of everyday meals, and actions in the halls and offices of those that shaped national policies in f[l]avor of the neoliberalization of the corn market. Mexicans' resistance to flexible accumulation through corn flourization poses the query: flexibility for whom? At the same time, these concerns reveal that material flexibility implies also rigidity from the perspective of the population that value other flavors and uses of corns. The introduction of cheaper corn instead of only flour has meant a similar threat since it forces farmers to leave the countryside, leaving milpas without the needed labor force for the subsistence of local landraces.

MASECA's work to stabilize that new order involved an effort to turn their own version of the history of corn and tortilla into public memory. That history on the one hand

silences the voices of farmers and former tortilla producers, millers, and consumers affected by the substitution of corn by flour, and on the other hand positions the company as the leader of the modernization and globalization of tortilla production while maintaining Mexican traditions. This strategy of corporate memorialization is a necessary step in the move from thick to thin identities in Mexico.

Responses such as Itanoni's -its owner argues- question the agro-industrial production of food and face up transformations brought about in the life of Mexicans by the neoliberal order. Itanoni positions itself, in the arena of the market, with the role of rescuing not only landrace maize, -called "native" corn-, but also traditional forms of tortilla and other corn preparations as well as indigenous subjectivities expressed in meals. This politics of identity, as Gille (2010) points out, diverts claims for the satisfaction of material needs toward the recognition of subaltern subjectivities. In doing that, Itanoni operationalizes the sphere of Oaxacan life with corn and tortillas to create a "concept" (a brand) that more appropriately fits into the market. Their decision of defining their production as gourmet and their dependence on tourist customers not only speaks of the need Itanoni finds in appealing to the taste of upscale consumers but also of the need of positioning themselves in that segment of the Oaxacan social class.

The convergence of the dichotomies alternative-conventional and gourmet-staple reproduced by Itanoni do not serve the cause of activists resisting the power gained by transnational corporations such as MASECA over their food but, contrary to that, reproduces the position of those companies as providers of corn foodstuff in Mexico.

Chapter Four

Drawing as a Weapon: Representations of Corn and Agriculture in a Time of Crisis in the Countryside.

Artemio is already out for his chores in the milpa and Elicita, his wife, stays home to do her household daily work. Like usual, she cooks with the TV on playing a morning show in the background. Everyday at 10:35 am, the Azteca TV station presents a series called *MASECA en la cocina con las estrellas* ("MASECA in the kitchen with the stars") conducted by a soap opera actress named Laura Flores. Today, an excited Flores walks into her TV set living room showing the camera the new, redesigned, package of MASECA flour and pointing out the recipes printed on one side of the bag: "Look what we have here, it says, 'The food for eating well.' Why does it say that? Because we have to eat enough corn and wheat. What can be better than do it with MASECA, made of 100% corn?" Then, she walks few steps to her right and she is already in a luxurious kitchen, where she welcomes the famous pop singers Mijares and Yuri, who were invited, like many other TV stars, to share their recipes for dishes made with MASECA. Elicita listens -while cooking her beans with *epazote*[87]- to Mijares' recipe for a carrot cake made with MASECA. During that TV episode they explain that MASECA is not only for making tortillas, but also can be used in more than 400 other dishes. Finally, Yuri ends the episode by saying, "*Porque si es MASECA, usted no se seca,"* ("if it's MASECA you don't get dried out"), a rhyme aimed at countering earlier *tortillero* slogans that referred to MASECA as "MASA-SECA," meaning "dried dough[88]" in Spanish.

[87] Epazote is an herb that grows as weed in milpas but frequently used by farmers in the preparation of beans in Mexico. It is also used as medicine for different conditions such as ashma, intestinal parasites, and flatulence.

[88] Maseca is actually dried and powdered dough. Earlier tortilleros wanted to make visible that characteristic of Maseca product as opposed to nixtamal made of fresh corn.

De Luca and Peebles explain that, "on today's public screen, corporations and States stage spectacles (advertising and photo ops) certifying their status before the people/public" (2002, p. 134). In that fashion, the main tortilla producers and the agro-food industrial complex target journalists and consumers with the goal of constituting and reproducing corporate identities through performances that normalize their presence in the market (and thereby naturalizing the rules that favor their enterprises). In my previous chapter I demonstrate this process as it was undertaken by MASECA, which was aimed at situating its corporate endeavors in a new remembrance of the history of corn and the tortilla. However, the public exposed to these corporate and State portrayals does not passively consume their messages. Rather, it exhibits different forms of listening, negotiating and contesting them, as can be seen in its responses, many of which also involve the construction of images. These responses, as De Luca and Peebles observe, can be seen as "critique[s] through spectacle, not critique versus spectacle" (2002, p. 134). They are also attempts to influence public opinion, carried out by telling the stories that are not told by the State and the business sectors. This chapter examines the use of drawing, and in particular of drawing cartoons and visual images of corn, as a means to counteract hegemonic narratives of success of the agro-industrial complex and neoliberal policies in Mexico. I focus my analysis first in cartoonists' responses to SAGARPA[89]'s "Wining Countryside" advertisement campaign (*campo ganador*), that tells Mexicans a story of government promoted progress in agricultural development, and second in visual images of *maiz* used to represent resistance or promote it against the impact of NAFTA and foreign technologies in corn agriculture.

[89] Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food.

Drawings such as editorial cartoons constitute a significant arena in which non-industry stakeholders represent the Mexican "culture of corn." These drawings show how the agro-industrial complex itself is contested through spectacle, an important part of which is humor. When embedded in cartoons and other visual images, humor becomes a powerful resource provided to the public to unpack the contradictions between hegemonic representations of the agro-industry and the impact of the agricultural policies on the cultivation of corn and people's diet. Those visual images are produced and reproduced as a means to convey a message of dissent. They don't only stay in newspapers and magazines as a once in a lifetime image event but circulate fluidly in the hands of the public and on the Internet. During the march on January 31,st 2008 organized by the Sin Maíz no Hay País campaign, I observed that editorial cartoons were even printed and enlarged as placards and displayed by demonstrators. Cartoons are also frequently reproduced in activists' flyers and on their websites. In an interview for the Chilean newspaper "Clarin", Mexican editorial cartoonist Antonio Hernandez noted that his cartoons are indeed used in demonstrations with giant prints. He also recalled, however, that a character of one of his cartoons was even brought to life in the form of a giant paper maché doll for a demonstration in Puebla[90] (Casasús, 2011).

Visual images, such as those produced in contestation to the interests of the agro-industry, as Hariman and Lucaites (2003, p. 37-38) explain, "are complex and unstable articulations, particularly as they circulate across topics, media, and texts, and thus are open to successive reconstitution by and on behalf of varied political interests, including

[90] Political puppets have also been created by cartoonists themselves in other parts of the world such as the work of South African political cartoonist Jonathan Zapiro with his influential political show Za News in which he uses latex puppets in the style of the 1980's British show "Spitting Image" critical of the Reagan's and Thatcher's administrations.

a public interest." Appropriation and re-appropriation of those visual images enables them to circulate and helps to disseminate their messages. At the same time, however it also exposes them to reconfigurations of the meanings and readings originally suggested on the image. As these visual images circulate, they not only represent views of the struggles in society, they also are constitutive of them. Cartoons as visual claims in the arena of news and opinion discourses play a role in the definition of everyday issues or events as "social problems" (Greenberg 2002).

Gamson and Stuart (1992) establish a difference between journalists and commentators, and situate the work of cartoonists as commentators among opinion columnists and editorial writers. Cartoonists however, not only enjoy more freedom to create with irreverence but, unlike journalists, they also have a "lack of constraints from direct involvement with the sources" (Gamson and Stuart, p.62). Journalists need to maintain a good rapport with their "sources," -State and corporate officials- in order to secure their access to information. -- They, however do not usually that advantage -to influence news writing- they have] with journalists" (Gamson and Stuart, p.62)

1. The Winning Countryside

In 2008, the debate about the impact of the implementation of the free trade agreement with the USA and Canada and the consequent crisis of peasants and farmers in the countryside was also the context of a State funded public relations (PR) campaign named "*Campo Ganador*" (which literally means 'The winning countryside – however

campo also means 'field' or 'course' such as in cornfield, in soccer field or golf course[91]). This campaign is an example of the State representation of national agriculture (including the national agro-industry with transnational participation) that was highly contested. In that campaign, the government drew a rather unexpected parallel between a Mexican golf player's success in international championships and the entrepreneurial development of Mexican agriculture. Introduced by the Mexican golf champion Lorena Ochoa, this TV advertisement (paid for by the Mexican Secretary of Agriculture) presented the countryside as a terrain or field of competition in which Mexico (and Mexican products) has also, like Ochoa, achieved victories[92].

That advertisement started with captions and a voice over saying: "When [only] few thought that Mexico would be a world champion in a sport such as golf, a Mexican changed that perception". Then, in a frontal medium shot, Lorena Ochoa walks from left to right on a green golf course wearing her golf outfit, a cap with the logo of her sponsors BANAMEX and an orange Lacoste shirt, while saying, "I have competed in the best *campos* of the world, but the *campo* I feel most proud of is the Mexican campo, a winning *campo*, like me." Next, a voice-over compares Ochoa with products of the Mexican countryside while the video shows images of industrial production in agriculture, livestock, and fisheries: "Like Lorena, many products of the Mexican *campo* are world leaders. We all work together to make all Mexican *campo* a winning *campo*." In the last two seconds, the logo of SAGARPA (Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food) is displayed.

---

[91] The State public relations campaign's use of those different meanings in their advertisement revealed that their target audience was not people from the countryside but the middle or upper class urban population.

[92] Link to the video: http://www.flickr.com/photos/joseperaltao/5978017779/in/photostream last accessed in October 26, 2011.

The countryside, compared with a golf course, is explicitly presented as a terrain of competition in which the alleged entrepreneurial victory of the players is achieved in the name of Mexico. Put it in those terms, the competitor-others (not mentioned in the ad) would be other countries' products, among which Mexican products are world leaders (like Lorena). The *other* "competitor other" suggested by the ad aired on TV precisely during farmers' mobilizations against NAFTA, however, the products of an undefined [from the perspective of the agro-industrial elite] group of small-scale Mexican farmers: the food produced by those who raise their voices to tell us of the crisis in the campo. More than foreign entrepreneurial players, they are actually those who do not fulfill the demands of 'competitiveness' with their production. The campo *ganador* campaign not only makes agriculture in the countryside a terrain of that competition, while celebrating the winners as a source of national pride, but also the alleged losers (farmers with different conditions and agricultural practices) are silenced in the narrative of the State advertisement.[93]

Following that advertisement campaign, editorial cartoonists appropriated the *campo ganador* images to expose the contradictions between State discourse and policies on agriculture development and the conditions of the farmers living in the countryside. For example, cartoonist Helguera appropriates SAGARPA's ad in the *campo ganador* campaign (Figure 2, see figures section at the end of this chapter). His cartoon shows golfer Lorena Ochoa (with the acronym of SAGARPA on her cap instead of the sponsor BANAMEX) explaining that, "I have seen hunger in the *campo*…. That is why we should not be on a diet while playing in a tournament."

[93] A long history of national policies that benefited some regions and farmers over others is also untold.

Helguera appropriates the *Campo Ganador* ad to comment on the ways the State sees the countryside. Ochoa is explicitly portrayed as a spokesperson of the secretary of agriculture instead of as merely a Mexican golf champion entitled by the media as an opinion leader. Situated as such a spokesperson, she comments on Mexican agriculture, however, the cartoonist makes her express the inability of the State to recognize the seriousness of problems in the living conditions of Mexican farmers. Through Helguera's pencil, Ochoa the golf player refers to hunger as a condition that depends on the individual's decision to refrain from eating. The cartoon not only situates the State in a privileged position (represented by the golf player) with a frivolous understanding of the crisis in the countryside, it defers the responsibility of resolving the crisis to the individual.

Helguera also refers to the *Campo Ganador* campaign in a different cartoon (Figure 3, see figures section at the end of this chapter), this time in order to discuss another angle of the State's approach to the countryside. In this drawing, the cartoon presents Alberto Cardenas, the secretary of agriculture, saying (probably to journalists outside the frame of the picture), "We are eager to talk with the campesinos... We will teach them all about golf." This reference to a dialogue with campesinos cynically alludes to protests that were happening at the same time that farmers were demanding a renegotiation of the NAFTA agrarian chapter[94]. Cardenas avoided to participate in conversations with farmers in their own terms.

Framing the discussion as an explanation of "everything about golf" to campesinos, the cartoon portrays, first, the lack of interest on the part of the State to listen to that population's demands. Second, it makes the rules of golf represent the rules of the

[94] I expand on those protests in my chapter five.

game of neoliberalism (taught for example through workshops with lessons of entrepreneurialism). Dialogue with representatives of the State is only allowed if it is about the free trade agreement and if it takes the form of a top-down explanation of the game. The subaltern is only allowed to talk and listen in the language of the free market that champions competitiveness in a game of international exports. That approach to dialogue is actually observed in the countryside, for example, with the State's agricultural technicians and microfinance NGOs that promote the substitution of traditional corn agriculture by products with comparative advantages. Alleged higher demands for products that would substitute corn in an international free market are supposed to have an important role in aligning farmers as players within the rules of the game. In that sense, the cartoon highlights another critical reading of the conclusion in SAGARPA's TV ad: "…We all work together to make all Mexican campo a winning campo." The efforts of the State are aimed at channeling the countryside into a framework of competitiveness with aspirations for the international market. The cartoonist thus makes visible the position of the State as distant from its margins, and unable to look inwards (to see the needs and consequences of state policy in the countryside) due to an agriculture policy framework that focuses on an international arena of exports.

In another cartoon, cartoonist Gonzalo Rocha portrays Alberto Cardenas, the secretary of agriculture, playing golf and about to hit the ball in the hole (Figure 4, see figures section at the end of this chapter). However, in the hole is a hungry and fearful campesino, covering his face with his hands. Cardenas holds the pole next to the ball but does not seem to be aware of the potential consequence of trying to make the hole. As portrayed by Rocha, campesinos are not only the invisible victims in the game of

NAFTA, but also are considered an obstacle to success from the perspective of the players. The game of the market painted as a game of golf by the State is also reproduced by the cartoonists to expose the superficiality of the State's social concerns, and to portray the goals in the market as irrelevant in the face of urgent population needs.

Cartoonist Hernandez also draws the secretary of agriculture talking about campesinos and golf: "Campesinos should instead appeal to international venues [such as the conflict resolution mechanisms of NAFTA]… …you see how Lorena Ochoa frequently goes to tournaments overseas" (Figure 5, see figures section at the end of this chapter). In that cartoon, Hernandez uses humor to make visible the State's limitations with respect to directly solving the problems of the campesinos. The State is represented not only as not having enough authority to implement changes in the face of international agreements but also as comfortably abrogating its social responsibility. The international arena is suggested by the Hernandez cartoon to be, in the eyes of the State, the terrain in which to achieve visibility and respect, like in the case of those seen as winners in international trade agreements or international sports tournaments. Cardenas's easy response in Hernandez's cartoon speaks of the downsizing of State power, a consequence of the neoliberalization of Mexico. Under this paradigm, State intervention to attend to campesinos' demands in contravention to the laws of the free market would be unacceptable.

All three cartoonists, Helguera, Rocha, and Hernandez, appropriate the State's "*Campo Ganador*" TV campaign to speak back by exposing the failures of the State's approach to agriculture. They make their argument for the public that the game promoted by the secretary of agriculture is actually played under the rules of international free trade.

The State is displayed not as an instance of articulating people's demands but as an apparatus that silences them and makes them invisible in its vision of the countryside. The cartoonists find in the visual spectacle that the State uses to represent itself the resources they need to make it clear that the "game" imposed by the State disregards the conditions of inequality in the countryside and is in part responsible for its reproduction. This critique, through the spectacle of humorous visual images in newspapers, is intended to counteract the government's attempts to delegitimize demands of campesinos regarding the impact of NAFTA on Mexican agriculture.

2. The People of Corn

In January 2011, the roundtable "Orozco, always a cartoonist?"(¿Orozco, siempre monero?) brought together well known Mexican cartoonists to discuss the famous muralist Jose Clemente Orozco's work on cartoons. Orozco, a Mexican artist from the first half of the twentieth century, a contemporary to Diego Rivera, worked as a political cartoonist during the beginning of the Mexican revolution. In the roundtable, cartoonist Rafael Barajas "el Fisgón" explains that cartoons influenced Orozco's work in murals and that his best murals are those that are also cartoons (Conaculta 2011). Orozco's participation in the political life of that time with his cartoons was – as the panelists complained- to some extent shameful since that artwork was paid for by the establishment opposing the ideals of the revolution. However, that artist's work is only one example of the importance of drawing, cartoons as well as murals, in the political life of Mexico and it is a testimony of the perception of those in power about the role of art media (as mass media) in influencing the public. Both murals and cartoons have a long

tradition in Mexico as venues to reach the public and persuade them in topics regarding social and political issues.

Even before the Spanish conquest, according to Brittenham (2006), the pre-Hispanic murals of Cacaxtla painted between AD 650 and 950 had a role in shaping a collective political identity for the population of their time (Figure 6, see Figures section at the end of this chapter). Those murals have later, in turn, become an iconic image appropriated, adapted, and circulated by different artists ranging from Zapatistas in Chiapas to editorial cartoonists in Mexico City newspapers. The appropriation of those images is still instrumental in the present for some activist groups to recall a collective identity and an idealized mythical Mesoamerican past related to the cultivation of corn. In the Cacaxtla murals, drawings situate the pre-Hispanic farmer as a member of a community that works with corn and moreover is a part of corn itself. The community and its cornfields are represented as a corn-farmer hybrid in which humans are both the farmer and the fruit of corn. Individuals represented by heads of people drawn in the place of corn kernels provide a powerful visual image that recreates a collectivity in which each plant is connected not to a single individual but to several of them. The human-non-human assemblage represented in those murals is actually a human community – non-human community assemblage interwoven within their territories.

Artists from the Zapatista Army of National Liberation, among others, have appropriated Cacaxtla's representations of community as people bodily connected to corn. However, they have done it by situating EZLN members in place of Cacaxtla inhabitants in order to represent them also as the present fruit of corn (Figure 7, see Figures section at the end of this chapter). Human heads wearing the characteristic ski masks of the EZLN

in place of corncobs or, in a different version of the same idea, similar masked heads are in place of each grain of the corncobs. While in both cases their masks hide their individual identities, such a garment also gives them visibility. With that motive, an anonymous artist from the EZLN, for example, illustrates an invitation to join the ideals of the Sixth Declaration of the Lacandon jungle (2005) and to spread that message. The text in a textile with that image of the corn-humans hybrid I referred to reads: "Everybody with the Sixth Declaration." This textile is a representation of the communication of EZLN ideas as an instance of different actors working on the pollination of corn, a scene not originally represented in the pre-Hispanic murals. The sun that provides light and energy to maize, as well as a bee, a butterfly, the corn plant, and its people are all protagonists in that scene of pollination. That scene in a napkin, made in 2006, suggests that the EZLN ideas play a role in a process of fertilization that concerns the people of corn. Since the Sixth Declaration of the Lacandon jungle is a manifesto critical of neoliberal globalization, the corn-human hybrid -portrayed first by pre-Columbian Cacaxtla inhabitants- returns to the present to speak of the problems brought about by the neoliberalization of Mexico.

In the Caracol Oventic, a Zapatista settlement in Chiapas frequently visited by tourists, mural representations of the corn-human hybrid shows Zapatistas wearing their masks as if they were not the corncobs but the grains (Figure 8, see Figures section at the end of this chapter). They all together form the image of unity as a community on the maize plant but, at the same time, they also each have distinct characteristics of color and different mask designs. This portrayal recalls a particular kind of corn that Mexican farmers call "pinto". In the Mexican countryside, "pinto" corn is a corn plant that

produces corncobs with grains of different colors. Farmers explain that diversity of colors as the product of cross-pollination among neighbors' milpas. Tortillas made with pinto corn are appreciated because of their texture and flavor. This same maize, however, is usually not well regarded in the mainstream corn market characterized by the circulation of corncobs with homogeneous grains of a single color and shape, similar to the imported corn. While this pinto corn is already the product of cross-pollination, the Zapatista representation of the corn-humans hybrid in those murals depicts it as a more complex living being that brings together not only the genes of different milpas but also the connections of neighbors themselves with an ideology alternative to the one implemented by the Mexican state.

Editorial cartoonist Ahumada appropriates that same Zapatista representation of the people of corn in his cartoon "*Jijos del Maiz*[95]" published in January 19, 2007 (Figure 9, see Figures section at the end of this chapter). By that time Mexicans were facing the tortilla crisis and campesinos were demanding that the government take corn and beans out of NAFTA and reject the introduction of GMO corn in the Mexican *campo* (Perez 2007).

In the place of the corn kernels, however, Ahumada replaced the masked faces with skulls. Pictured as viewed from below, it situates the viewer in a position of powerlessness in front of a corncob of death, resembling a tower of skulls, and brought by the new agricultural policies in Mexico. The silk fibers from the corn tassel are blowing in the wind, as if the corn were already freed in the outdoors.

Ahumada's appropriation of this iconic image of the people of corn is a

[95] "*jijos del maiz*" means "children of corn". *Jijo* is slang for *hijo*, usually in the context of an insult.

counterpoint to the ideals of an alternative society (depicted as a human-corn hybrid). Its representation of death with the skulls emphasizes the threat of the disappearance not of corn itself nor of consumers themselves, but of an entire way of living. The cartoon works as a cautionary tale that alerts the public of the potential impact of opening the markets to US corn and introducing GMO corn seeds in Mexico. This impact is depicted as the deception and death of the dream of a world alternative to the hegemonic neoliberal regime. The corn-human hybrid as an ideal of interconnectedness becomes, with the intervention of corporate genetic engineering, explicitly a "monster". Not the corn-human co-evolutionary assemblage normalized in Mexican discourse, but the coupled GMO corn-human that brings within different relations of production and consumption and artists attempt to prevent from *naturalization* in Mexico. That is the undesired monster in which, however, Haraway still would recognize a sister and a victim: the corn as a man-made creature sacrificed to save the world from hunger. However, in Ahumada's cartoon scheme, the hybrid that recalls the pre-Hispanic representation of human -- non-human interconnectedness becomes a frightening monster that is not only an altered ear of corn but also an altered society as a product of global capitalism. It becomes a monstrous society that gives birth to death instead of life, a society to be avoided.

In his cartoon "*el maíz y el país*" ("The corn and the country"), Gonzalo Rocha also draws an image of an anthropomorphic ear of corn (Figure 10, see Figures section at the end of this chapter). In this case, different from others' depictions of corn in cartoons, it is not used to represent a threat to the cultivation of Mexican corn but an enemy associated with the threat. This is a corncob as a face wearing Uncle Sam's hat, beard

(leaves), and hair (corn silk). The dark background conveys a sentiment of fear in connection to the arrival of this seed portrayed as US corn. Published in January 3th 2008, three days after the end of the protection of Mexican corn under NAFTA and the full implementation of that trade agreement, Rocha's cartoon is an attempt to provoke his audience. Its ironic title, "The Corn and the Country," (El Maíz y el País) responds to the campaign slogan (and activist group name) "Without Corn there is no Country" ("Sin Maíz no hay País"). It suggests a scenario in which seeds and corn imported from the United States become hegemonic in Mexico. This representation of corn makes visible a threat by contrasting scenarios, with a title suggesting that even with NAFTA, there is still a corn and country, however, that country is not Mexico but the United States.

A similar message is more explicitly presented in a cartoon made by El Fisgón, published three weeks after Rocha's (Figure 11, see Figures section at the end of this chapter). In that cartoon, a farmer painting graffiti with the slogan "Sin Maíz No Hay País" is questioned by a man wearing a suit. Upon reading the slogan, the suited man asks the farmer, "How come? What about the United States?"

Both cartoons refer to the threat that NAFTA represents for small-scale farmers in Mexico but, different from other cartoons, they point out the United States as an antagonist. El Fisgon, however, introduces a third party involved in the crisis; a Mexican businessman or bureaucrat who is unconcerned and expresses no discomfort with the scenario of US corn prevailing in the Mexican countryside, even suggesting it as a given. The presentation of these characters that contrast two different possible scenarios unfolding from Mexico's trade relations with the United States intends to provoke a response in the audience. It first reminds the readers of the history of political and

economic tension in relations with the United States[96] as a context of the crisis in the countryside. It is also a means of drawing the line between those that represent a menace to small-scale farming and those that practice and defend it. That form of dividing parties and depicting the aggressor/other opposed to the self under threat resembles the editorial cartoons that, according to Shelton, are made in times of war in order to "inspire the public to fight" (2004, p.18).

Common themes in cartoons' portrayals of the relations between the US and Mexico, especially after NAFTA, are the oversized power of the US in contrast to a weak Mexico and the US's lack of concern regarding Mexico's future (Morris 2000). These concerns are usually represented in the size of their characters. This way of contrasting the power of countries through the size of their characters or products is also found in cartoons that refer to the effects of NAFTA on Mexican agriculture (Figure 12, see Figures section at the end of this chapter). In a similar fashion, size is used in representations of corn as an explosive. Some cartoons and graphic representations of corn turn that staple food metaphorically into a device of direct material aggression in the form of an explosive. GMO corn imported from the US is portrayed as a missile targeting Mexican countryside and corn from the milpas as a corn-grenade.

3. **Corn as a weapon**

In January 2008, the Mexican political cartoon magazine "El Chamuco" dedicated a special issue to concerns about the impact of NAFTA in Mexico. With a front cover illustrated with a US corn bomb falling on an unaware campesino and his milpa, the

[96] For more on cartoons in the history of relations between US and Mexico see: Morris, D. (2000).

magazine was displayed and for sale in many of Mexico City's downtown kiosks during the massive "Sin Maiz no hay País" march of January 31st (Figure 13, see Figures section at the end of this chapter). That afternoon, the picture on El Chamuco's front cover seemed to echo demonstrators' chants from the display cases and hangers of the newsstands.

That front cover cartoon was entitled, "2008, This year we will have a blast," by which the artist referred sarcastically to New Year celebrations by using the double meaning of *bomba* as an explosive and also as a good time in Mexican slang. In that visual representation of the full application of NAFTA in agriculture, the disproportionate size of the corn-bomb in comparison with the campesino on his milpa referred, as in previous cartoons, to a perception of the differential power of the parties involved in the trade. More importantly, the conditions of the agreement are portrayed as an aggression launched by another nation-state, with the United States pointed out as the enemy.
A similar cartoon drawn by Juan Alarcon, highlights not the attacker but the content of the threat in the missile as it shows not an American flag but a label on the corn missile that says: "*transgenicos*" (Figure 14, see Figures section at the end of this chapter). In this version of the same story, the critique not only refers to the impact of the free trade agreement on Mexico's agriculture, it is also an attempt to contrast the conditions of that agreement with the everyday situation experienced by Mexican people themselves. Mexico, however, is represented as an empty house and milpa in the trajectory of the bomb. Nobody is at home since, according to a sign drawn next to the door, its people "went to protest for the Value Added Tax (IVA)". The cartoon points out with extreme irony the contradiction of welcoming transgenetic corn into Mexico without the tariff rate

quota (that protected the national corn markets before 2008), while Mexicans are in need of demanding a reduction of taxes on the products they buy. Transgenetic foreign corn, as a potentially cheaper option for farmers and consumers that complain about the IVA, is portrayed not as a solution to the demands for lowering prices but as an attack on Mexicans' economy.

Those representations of corn as foreign aggression are usually labeled with flags, texts, or faces (like Uncle Sam's) since corn itself is in the first place seen as connected to Mexico's and other Mesoamerican countries' identities. In these countries, however, representations of corn bombs have also taken the form of a device for resistance in the shape of a grenade of subaltern manufacture. As visual representations of corn they convey the thick meanings of traditions related to the history of the people of corn. However, as a hand explosive, it simultaneously brings together the idea of involvement in active [armed?] resistance with the ideals of the culture of corn. The relatively smaller scale in fire capability of the grenade in comparison to a missile also reveals the disproportion of the confrontation of those whose lives are perceived as being connected to the cultivation of corn. While the aggressor is depicted through their missiles, a small hand explosive represents the resistance of the subaltern with a different strategy of engaging in the confrontation. The portrayal of corn as a grenade, however, is not exclusive of Mexican artists but has probably been circulated by and appropriated from those affected by the Guatemalan civil war and the "Contra" war in Nicaragua in the 1980s. According to historian Michael Lehman (2011[97]), the representation of a corn grenade was also used by Guatemalan and Nicaraguan activists during the Sandinistas vs.

[97] Email communication (August, 30, 2011)

Contras (United States backed counter-insurgency army) conflict. Lehman describes how he obtained a neckerchief with such a design:

> "I obtained the neckerchief in Managua, Nicaragua in 1984. It was my second trip (first in 1982) to assist in solidarity efforts during the war against the contras. This time I had an interpreter, a Guatemalan colleague. We were staying in the Intercontinental Hotel, one of the few major buildings to survive the 1972 quake in downtown Managua. We went out for a walk after dinner, seeing the sights, much of which was the destroyed part of downtown.
> We ran into some Guatemalans who lived in a place they'd constructed among the ruins of one of the buildings there. They were agricultural laborers and activists from the southern Pacific coast region who'd been forced into exile in Nicaragua by the repression.
> I don't recall the name of their organization, but it was not one of the four that made up the revolutionary general command at the time in Guatemala. In fact, neither myself nor my companion had heard of it before... They did organizing among the migrant laborers who were brought down from their mountain homes to work on the coastal export plantations.
> My companion may have given them something in exchange for the neckerchief, but only after they offered it to us *gratis*. It was an interesting conversation for my friend, who at the time was in the sort of semi-forced exile that was all too common due to the extent of the repression in Guatemala. The image [of the corn grenade on the neckerchief] was certainly not one that could have been displayed openly in public there." (Lehman 2011, email communication)

Guatemalan and Nicaraguan as well as Mexican indigenous communities identify corn as a central cornerstone of their communities' economic and social life. Common myths of origin connect them in practices associated to the cultivation of corn[98]. A representation similar to the one found by Lehman on the Central American neckerchief was also reproduced by Cuban sculptor and cartoonist Alejandro Falcó Chang, collaborator on the *Juventud Rebelde* (Rebel Youth), a Cuban Newspaper that started the debate in the island about the introduction of GMO corn in Cuban countryside (Figure 15, see Figures section at the end of this chapter). The Cuban development of

[98] Guatemalan literature Nobel prize, Miguel Angel Asturias published in 1949 his novel Los Hombres de Maiz (The People of Corn), in which he brings together a set of ideas connected to the culture of corn, that according to him rejects the commodification of corn and territories and the commercialization of corn for profit.

transgenetic corn was intended to substitute food imports on the island (Vadés 2010). The first experimental GMO corn crops were planted in Cuba in 2008 (Funes-Monzote 2010).

In Mexico, corn had already been portrayed in visual images as a signifier of revolution since the late 1920s on Tina Modotti's photographs. An Italian artist established in Mexico City and a member of the Mexican communist party, Modotti depicted the role of corn as a revolutionary object during the Mexican revolution. Her photographs "Bandolier, Corn, Guitar" (1927) and "Bandolier, Corn, Sickle" (1927) (Figure 16a and 16 b, see Figures section at the end of this chapter) had become iconic representations of corn as a protagonist in the campesinos' struggles during the twentieth century Mexican revolution. She presents corn as situated at the center of instruments of revolutionary change as a source of energy and *campesino* identity in two triads that connect them as tools for fighting, working, and playing music.

More recent visual representations of corn in Mexico such as the corn grenade also bring together its meaning as instrument of change and an axis of community life. In November 2008, when the Mexican news informed of a scientific study confirming the presence and rapid dispersion of transgenes in Mexican corn (Enciso 2008), graphic designer Alfonso Contreras reproduced and uploaded on the Internet his depiction of the corn grenade (Figure 17, see Figures section at the end of this chapter). His design situated the grenade with bright colors at the center of a frame filled in with the green and red background colors of the Mexican flag. The text on his design reads: "People United. Mexico in the struggle. The force of the *Campo.* November 2008. Respect and Work/Labor". The yellow grenade topped with a grey metallic detonator emerges from

the corn husks. Particularly interesting in his design are the font of the text and the inverse orientation of the words, which resemble messages written as Soviet propaganda. The design suggests a sympathy for socialist ideals while highlighting the Mexican state conveyed by an ear of corn situated at the center of the flag. Here, the corn with a grenade shape is a call for proactive involvement in national struggles for dignity and work in the context of the values associated with the culture of corn.

The graphic designer entitled this work "My Historic Moment" referring to his design as a participation in a historical process, and suggesting it to be a theme he does not generally work on[99]. That perception of agency by designing and uploading a visual image on the Internet, suggests an expectation of making it available for others engaged in activism[100]. Left on the Internet without restrictions for free reproduction, this image of corn is provided explicitly in order to be circulated.

A similar image has been appropriated as a logo by the Chicano hip hop singer and community organizer from Los Angeles, California, David Barragan. Performing with the name "Olmeca[101]", he defines the corn grenade to be about "truth and *cultura*" on his popular song entitled "Corn grenade renegade." The chorus of the song reads,

> "What is the weapon of your choice?
> Truth and *Cultura*. –bombing [with] the corn grenades-
> I am full blood renegade".

Defining the corn grenade in those terms, although imprecise, the singer uses his corn bomb as a symbol that refers to spreading the values of a tradition imagined as rooted in the land of the people of corn, South of the US border, not as a device for

[99] In fact, most of the work Contreras displays on the internet is oriented to advertisement.
[100] I contacted Contreras over the internet to interview him but he only responded me that I could use the corn grenade image if I find it useful for my work (August, 25, 2011)
[101] That name recalled the Olmecs, first major pre-Hispanic society of the Mesoamerican region, considered to be influential in the development of the Aztecs and Mayans.

prompting the use of violence or explosives. While his representation of the corn grenade image is not visual but musical and poetic, he visually reproduces the corn grenade in black and white as his logo (Figure 18, see Figures section at the end of this chapter), which defines his identity as an artist engaged in social activism. His hip-hop lyrics call for bombing the world with "truth and *cultura*" by which he refers to the culture and traditions of people of color with an emphasis on remembering the history of the indigenous people of Mesoamerica (Rojas 2011). His corn grenade is his weapon for what he states as his life's purpose: to "help to inspire real change" (Rojas 2011). Significantly, Olmeca's activism also includes activities to support indigenous people from Chiapas and collaboration with the Zapatista communities where he wrote and recorded most of the lyrics of his album "*semillas rebeldes*" (rebellious seeds) (Rojas 2011).

Similar to Olmeca, and also on the other side of the border from Mexico, on the walls of the streets of Philadelphia, grafitti artist Stuck 731 has posted his own representations of the corn grenade.[102] These consist of black and white images of the corn grenade that he designed and printed on paper (Figure 19, see Figures section at the end of this chapter). His corn-bombs are disseminated in Philadelphia without any explicit message. However, like that of Olmeca, the artwork of Stuck 731 promotes the Zapatistas and displays an interest in Mexican indigenous causes. Among his work, he has murals with portraits of the EZLN Sub-comandante Marcos as well as Mexican

[102] http://tagthisphilly.blogspot.com/2011/07/stuck-731-brings-us-corn-grenade.html

heroes Benito Juarez and Emiliano Zapata, all of them iconic characters and leaders of movements connected to the defense of indigenous rights in Mexico.

Another important use of the image of the corn grenade is as a signifier of the "seed of trouble." This phrase was coined by Greenpeace to speak of genetically modified corn in 2002, a year after the publication of the findings of the transgenetic contamination of Oaxacan corn in the journal *Nature*. In response to this news, Greenpeace convoked participants to a contest they called, "Seeds of Trouble, A Cartoon/Graphic Art Competition". The winning graphic design portraying "seeds of trouble" was an image of a darkly colored corn grenade situated (at the left of the frame) among many aligned and homogenously yellow corncobs. The meaning of 'trouble' in this case was the anti-establishment spirit displayed by 'renegade' Olmeca's corn grenade but referred to the emergence of dangerous corn, a genetically modified one, in the landscape of maize cultivation (Figure 20a, see Figures section at the end of this chapter). The darker color of the grenade is not meant to represent a less common maize variety but to highlight its presence as out of place and to produce an effect of distrust. Printed by the same organization, a subsequent image of the grenade (Figure 20b, see Figures section at the end of this chapter), shows it as a yellow corn standing alone and lighted from the left on a dark background to elicit fear. The homogeneity of clean yellow corn portrayed on the first poster is not a source of suspicion, as troubling, but it is considered to be the standard put at risk by a dangerous seed. That appropriation of the corn grenade visual image - widely distributed by Greenpeace- was probably effective in communicating the idea that GMOs in cornfields mean trouble. By the same token, however, it silenced the message related to the values of the corn culture conveyed in

previous representations of the corn grenade. The work of Contreras, Olmeca, and Stuck 731 however were made after Greenpeace's corn design.

An image of the corn grenade portrayed as trouble was also circulated by graphic designer Jerry Russell for "The Environmental Magazine," a US electronic magazine that define itself as focused on "shar[ing] ideas and resources so that readers can live more sustainable lives and connect with ongoing efforts for change" (EMagazine 2011)[103]. Its blogger columnists however -the magazine explains- are experienced environmental journalists that "provide weekly insight into where to find the best green products, the environmental legal campaigns to watch, the latest in environmental art and eco-documentaries, how to avoid toxins in the home, just-launched renewable energy innovations, the coming impact of electric cars, the adventures of eating locally and much more" (EMagazine 2011). With that broad range of topics, journalists of this magazine publish notes about for example, environmental consequences of *fracking* in gas mining side by side with articles on ecological friendly fashion and green holiday gift ideas. In that magazine, Russell's design of GMO corn entitled "Genetic Engineering in Food Crops"[104] appropriated the corn grenade to illustrate corn crops not as a symbol of peoples' resistance but as a representation of a new generation of dangerous plants and seeds. (Figure 21, see Figures section at the end of this chapter)

The corn grenade has also been appropriated and commodified by the Canadian clothing company Lawless Concept (Figure 22, see Figures section at the end of this chapter). In this case, the corn grenade stamped in certified 100% organic cotton t-shirts became an object for sale to help customers from Canada (a partner in NAFTA) display

[103] http://www.emagazine.com/about-e/
[104] http://www.flickr.com/photos/jerryrussell_309/2390908792/

the identity of fashionably rebellious youth[105]. The anti-establishment angle of this visual image previously re-appropriated by "renegade" singer Olmeca is reproduced among other icons, such as guns, and grenades -that bring about plants- as images to wear.

This market oriented appropriation of iconic visual images is similar to the process described by Hebdige (1979) to be the incorporation of deviant style or behavior (of subcultures), which originally challenge the established order, within the "dominant framework of meanings" (Hall 1977, Hebdige 1979, p.94). Hebdige called it incorporation in the commodity form since the transformation of these images into mass-produced signs is a process of reframing them through their circulation as objects for mass consumption. In similar fashion, the spectacular quality of the corn grenade makes it an attractive image that, mechanically reproduced in commodities (in this case next to a green gun shooting a plant), travels beyond Mesoamerican territories and becomes incorporated into mainstream discourses of green environmentalism. Thus, they communicate a message, according to Hebdige, "even if the meanings attached to those commodities are purposely distorted or overthrown" (Hebdige 1979, p.95). The incorporation of the corn-grenade in the commodity form operates not only by massifying it as an object of consumption but by greenwashing.

Clarke also observes in his study of subcultural styles that, in cases such as this one, forms are "dislocated from the context and group which generated it, and taken up with a stress on those elements which make it 'a commercial proposition,' especially their

[105] The company describes its targeted customers and its own identity in their 'about us' statement: "It's rumored that your personality comes from your wardrobe, in that case it's also rumoured that dressed in Lawless you can leave your bubble and wiggle in a bit of trouble, because now you're the dogs bollox, you are mustard. Some might write about you now, you're perfect and eyes are scanning you up and down, beautiful, dangerous and addictive eyes…" (http://lawlessconcept.wordpress.com/about/)

novelty" (1993, p.158). Clarke calls this phenomena defusion. The subversive character associated with these icons is tamed and turned into a regulated object of and through consumption. The examples of the corn grenade show the dislocation posited by Clarke. In this dislocation, however the co-existence, from different positions, of multiple and changing forms of decoding that visual image in particular social and historical conjunctures is still possible.

When Lehman and his translator came across the activists with the neckerchief corn grenade in the context of the cold war US military intervention in Central America they knew they were in front a visual image that could only circulate underground due to it charged subversive meanings. That corn grenade is a hybrid of corn as a living being, an object of the [re]production of human life, and a hand bomb, a device for the production of death. But corn in Mesoamerica is also a central element of life in the fabric of indigenous societies as the axis of communities' cultural and economic dynamics. In the specific conjuncture of the Contra war the hand corn-bomb, with its implications of death in the name of survival, had limited circulation. Later, similar images were still associated with resistance but were redefined as non-violent or as fashionable ways of highlighting individual identities.

In the eyes of the art designers for Greenpeace and others, however, the grenade as danger of death hidden in food is attributed to the represented evil-other, the producer of transgenes that make of corn a Trojan seed to rain death on life and diets as practiced and imagined. Olmeca however, re-de-codifies the indigenous cultural aspect seen as inscribed in the visual image of corn grenade. In his historical conjuncture, his appropriation of the bomb (that becomes also a form of branding his artistic identity)

requires to resolve the contradiction of life and death, in a non-Cold-War context in the U.S. Thus, he metaphorically re-assembles the grenade as a device to spread not death but what he called "truth and *cultura*." His own commercial manipulation of that iconic image requires him to stress the more 'acceptable' elements and de-stress the others (Clarke 1993).

5. Drawing as a weapon (conclusion)

Editorial cartoonist and art designers participate in the discussions of the impact of agricultural policies in Mexico through their production of visual images. Those images, however, are in constant circulation in which their forms and meanings are transformed and appropriated. They are made of and become material that is available to construct meanings, as Hall (1976) argues for the case of the meaning making process of subcultures' iconic objects. That material is never raw since, as Hebdige explains, it is "always mediated: inflicted by the historical context in which it is encountered" (1979, p.80). Representations of corn such as the examples of corn bombs have been re-crafted and imbued with diverse meanings in the different conjunctures in which they have been drawn.

Mexican cartoons that critique the role of the State in the crisis of the countryside situate the Mexican State not just opposed to other countries such as the US in the context of NAFTA but also opposed to its own citizens. Cartoons made in the 1990s, the decade of the signing of NAFTA, however, portrayed the relationships between the US and Mexico as a conflictive relation of nation states in the context of that commercial agreement (Morris 2000). Duss (2001) explains that cartoonists that critique national authorities while simultaneously representing national problems as conflicts between

nations actually become, with their art, allies of the State by promoting nationalist sentiments. Mexican cartoons portraying the US as an antagonist country situate Mexico's less protected citizens such as small-scale farmers targeted by the US. The farmers not only are depicted negatively impacted by the lack of interest from their own State authorities but also by the intervention of the US in the Mexican agricultural market. Thus, farmers are shown as suffering from the actions of both states, despite the Mexican government's nationalist discourses displayed in the media of nations competing in the arena of the free market. Those cartoons are, in the arena of discussions about the impact of the agro-industrial complex and NAFTA in Mexico, not only critiques to [corporate and state designed] spectacles but also critiques through spectacle. That spectacle, however, is not meaningless extravaganza but "provide[s] meta-language for discourse about the social order by constructing idealizations of the world, positioning readers within a discursive context of "meaning-making" and offering readers a tool for deliberating on present conditions" (Greenberg, 2002 p.182). Moreover, Duss in his discussion about cartoons reminds us of Freud's understanding of the operation of humor, as "subvert[ing] psychological control by relaxing the conscious in favor of the unconscious" (2001). If he is right, the humor provided in cartoons offers opportunities to empower their audiences by creating the conditions for raising critical questions. In that way, for example, as Cohen explains it in his study of the history of US cartoons, these images can help in the formation of class consciousness, through what he calls a class conscious humor (2007). In Mexico, humor in cartoons offer the audience a door to unpack and question the contradictions between hegemonic discourses of agro-industrial progress and those critical of the actual conditions of most farmers in the countryside.

Thus, it also becomes, as Duss (2001) and Hart (2007) have pointed out, another weapon of the weak, among gossip and minor sabotage, studied by Scott (1985).

However, in the case of editorial cartoons, we cannot take for granted the power of media and the role of newspapers editors in framing visual discourses under the rubric of their editorial line. Moreover, different from the weapons of the subaltern in Scott's study, the technology for mechanical reproduction used by newspapers provides artists with strength to reach their target with humor in opposition or support of those in power (Duss 2001). Nevertheless, those same cartoons and other visual images are further appropriated and reproduced in the creation of banners, flyers, paper mache dolls for demonstrations as well as websites in protests against the impact of NAFTA in Mexican agriculture. Mexican cartoons and graphic designs of corn are thus created and turned into instruments for confronting the State's and corporations' narratives of agro-food industrial complex success that normalize the neoliberal rule. The cartoonists' response to the *Campo Ganador* campaign funded by SAGARPA for example uses drawing as a means of resistance to naturalization of the neoliberal order in the terrain of agriculture. Their cartoons not only expose the contradictions between national policies and the conditions of farmers in the countryside but also disrupt attempts to normalize competition and the imaginary leveled field of free market as the terrain of individual and national success. They also confront the attempts to define national subjects as national products (such as a 'made in Mexico' golf champion or aspiring agricultural exports entrepreneurs) that in one hand achieve individuals' and country's prestige in the international arena while on the other shelter the prevalence of private, corporate, and

transnational capital under nationalist discourses[106]. That narrative presents agricultural production as a tool of international market success instead of, for example, a tool of improving producers' living conditions, feeding the national population, or food sovereignty. Cartoonists humorous portrayals of those state and corporate narratives - which highlight, for example, the stories of hungry farmers instead of a prosperous countryside- offer tools to unpack the contradictions of the implementation of NAFTA in Mexico's agriculture. Visual images of corn such as portrayals of that food staple as a community and in the form of a grenade present an alternative project of people's interaction among themselves and with their environment. Their focus on the social aspects and the culture of corn represents an attempt to situate the discussion and prompt actions out of the terrain of the market where economic rationalities are prevalent.

[106] Curiously, those nationalist discourses become instrumental to shape the conditions for neoliberal endeavors. The production of the "modern citizen-subject, the 'interchangeable' individual of political economy, and (…) social institutions [as an effect of nationalist mobilization, is aimed to] permit the integration of any nation into the world economic system" Lloyd (1999, p.20). In Mexico, the same neoliberal move that promote that "modern citizen subject" also downsizes the state itself, handing in "the nation" to "the market". The resistance to that mobilization however also appeals to a nationalism that not only is not controlled by the state but also opposes it. With cultural arguments it does not oppose modernity but calls for an alternative modernity of solidarity inspired by an idealization of the culture of corn.

Figures

Figure 2.


ESTAMOS DISPUESTOS A DIALOGAR CON LOS CAMPESINOS... LES VAMOS A EXPLICAR TODO SOBRE EL GOLF.
Cabarga

Figure 3.

Figure 4.


LOS CAMPESINOS DEBERÍAN MEJOR ACUDIR A INSTANCIAS INTERNACIONALES...
...YA VEN A LORENA OCHOA, QUE SEGUIDO VA A TORNEOS EN EL EXTRANJERO...
SAGARPA
www.monerohernandez.com

Figure 5.

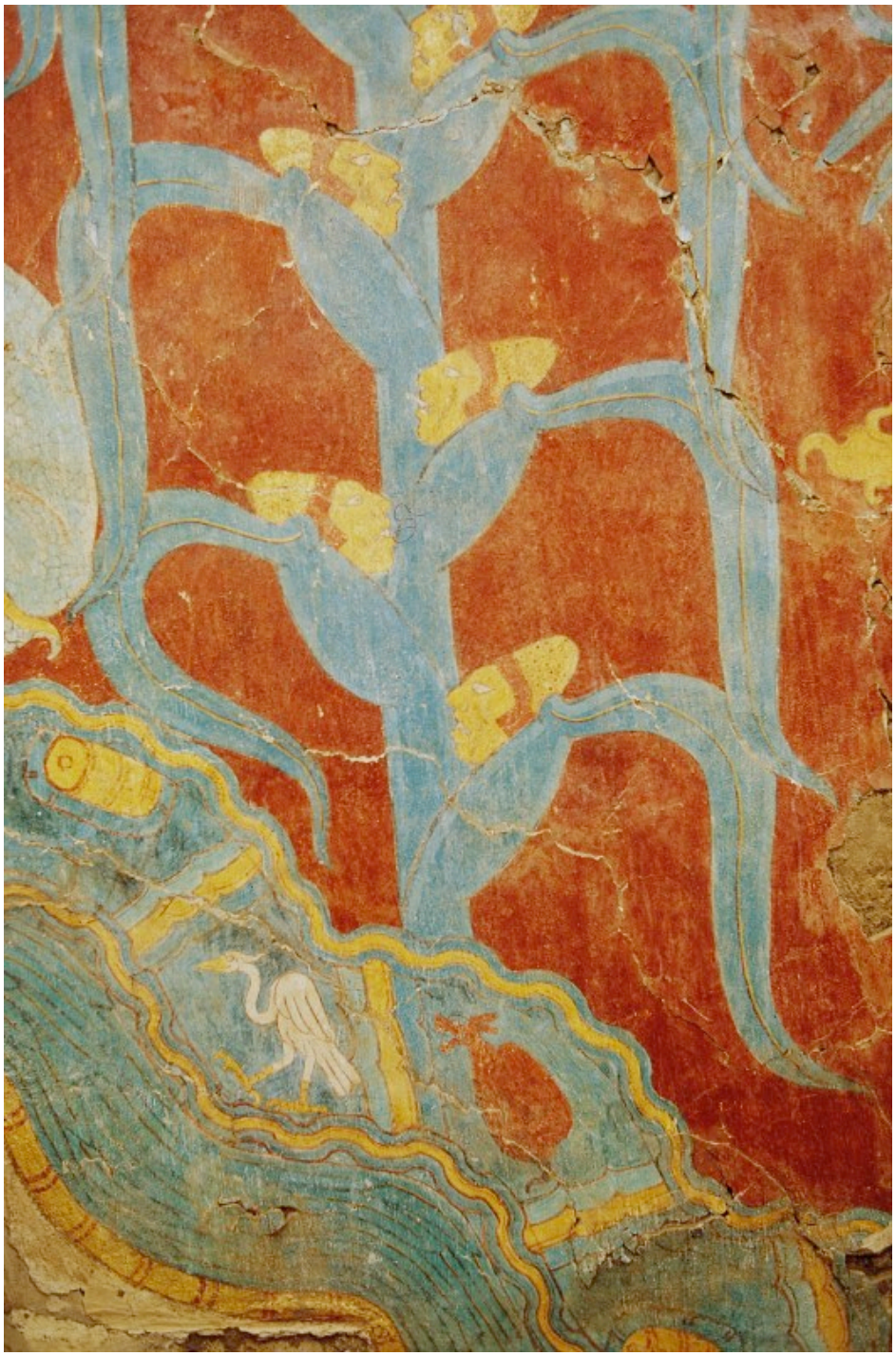

Figure 6.

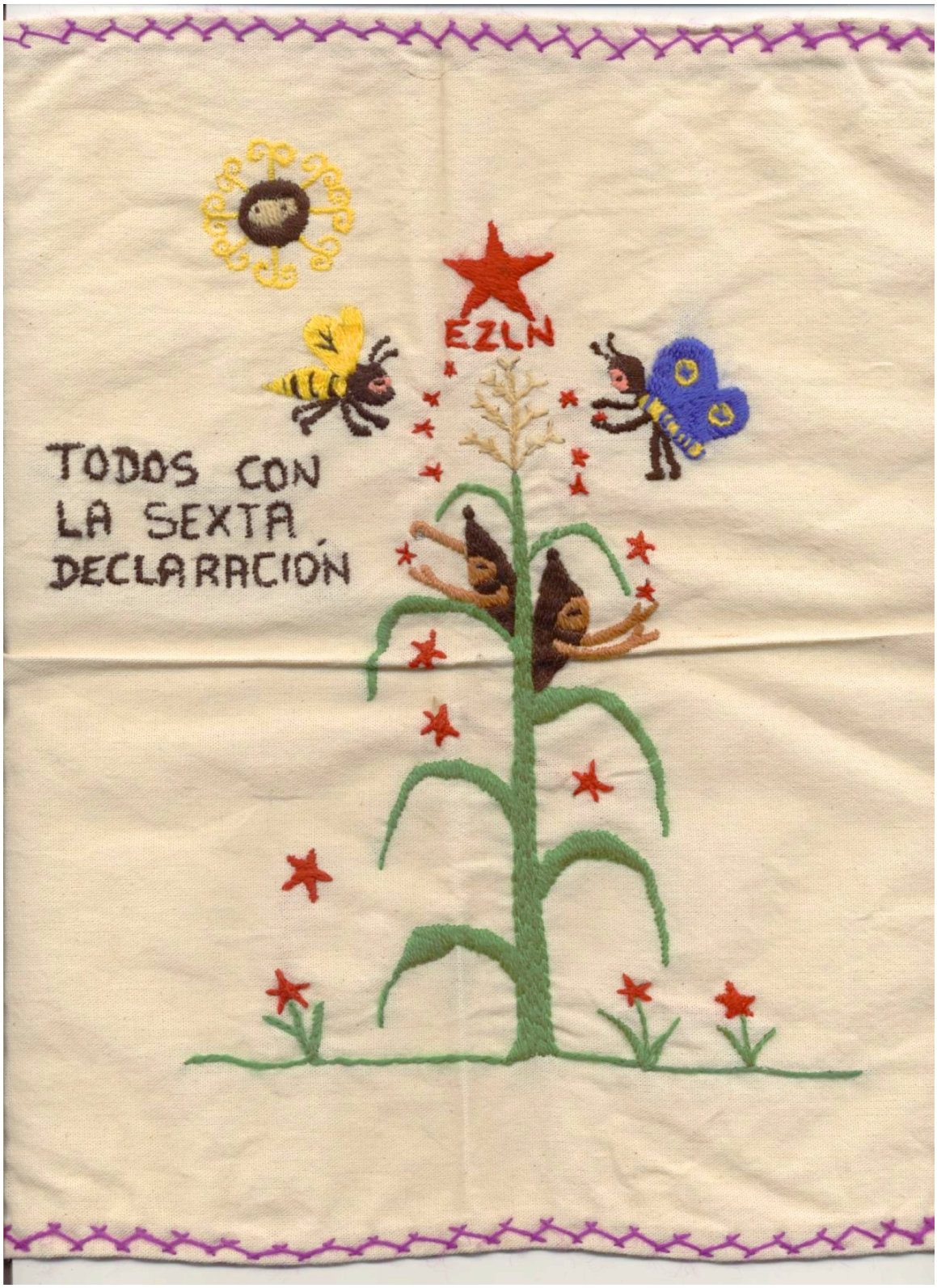

Figure 7.

Figure 8.

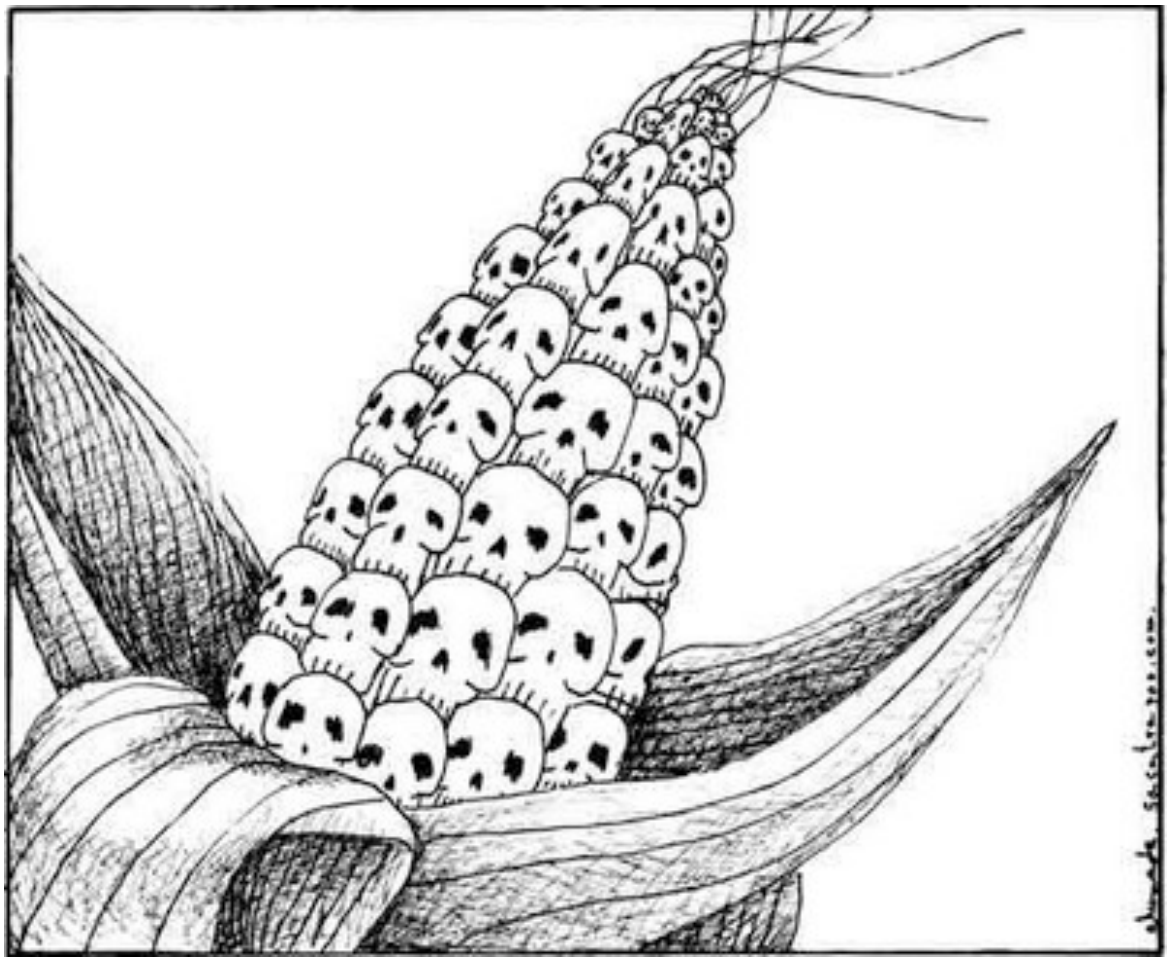

Figure 9.

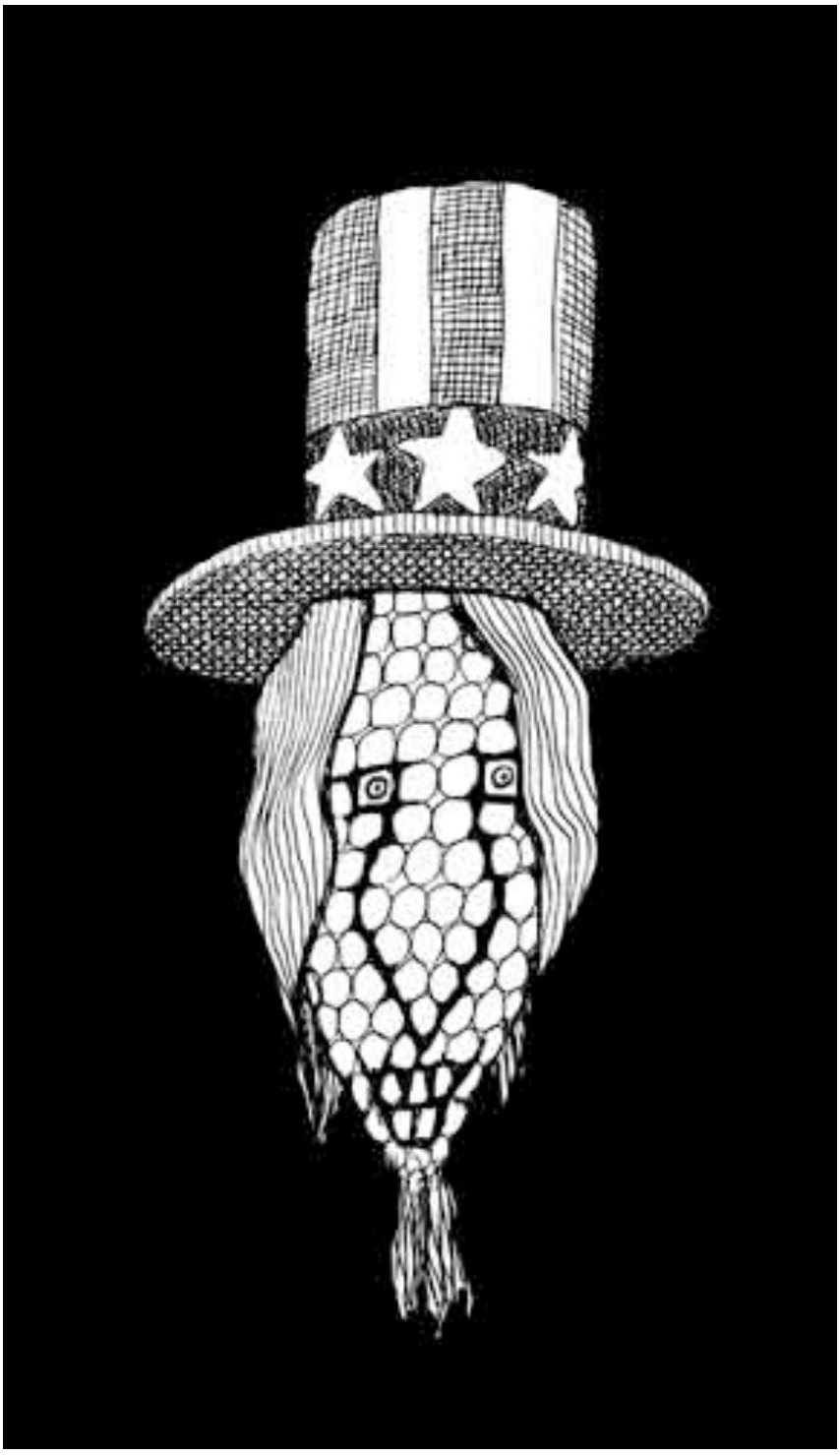

Figure 10.

Figure 11.

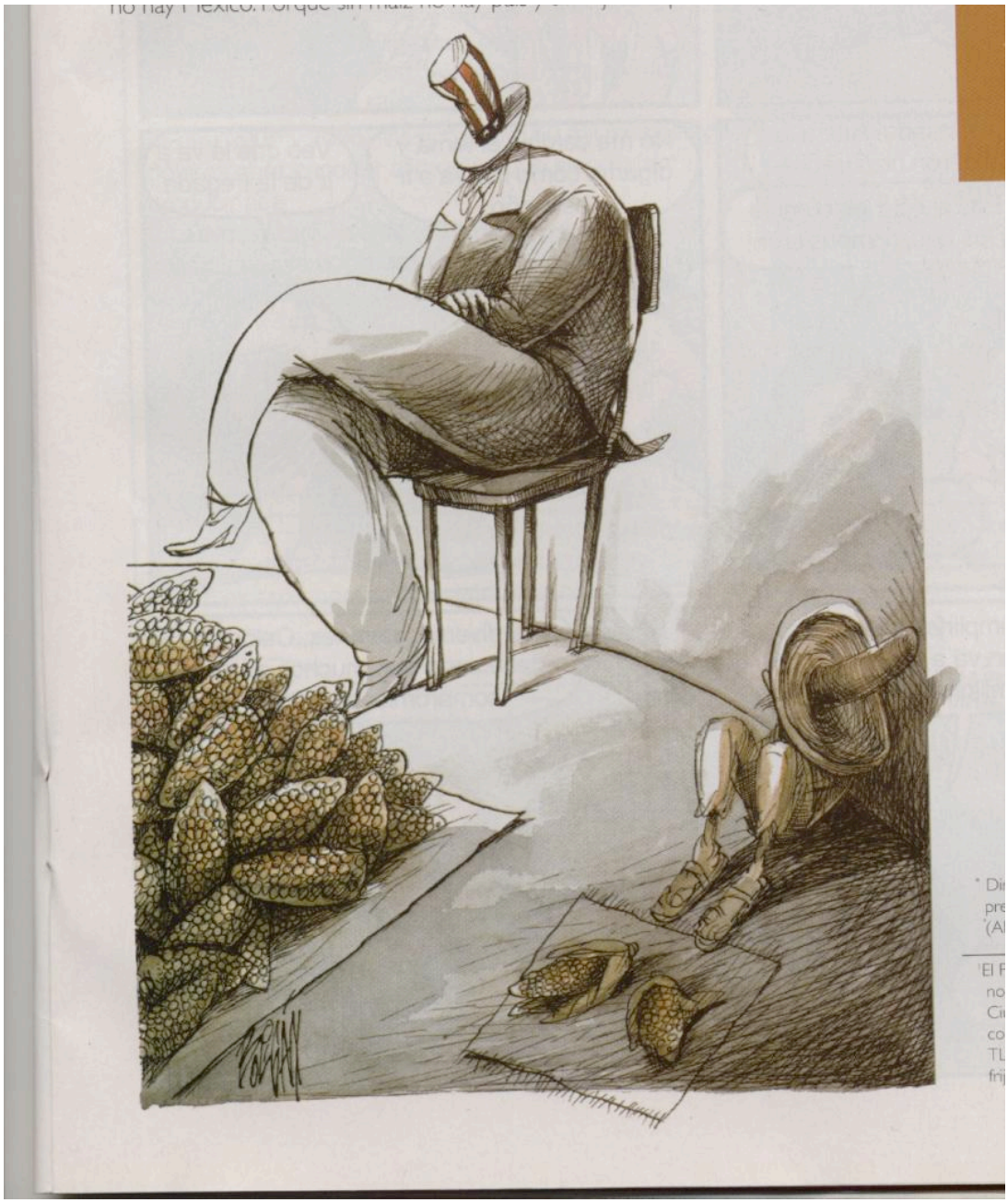

Figure 12.


NÚMERO 140
14 de enero de 2008
EL CHAMUCO
y los hijo
el fisgón
helguera
hernández
patricio
rius
2008
ESTE AÑO NOS VA A IR BOMBA
$ 20.00 pesos
ENTREGA DE PREMIOS EL CHAMUCO 2007
CARMEN ARISTEGUI Y LA LIBERTAD DE EXPRESIÓN

Figure 13.

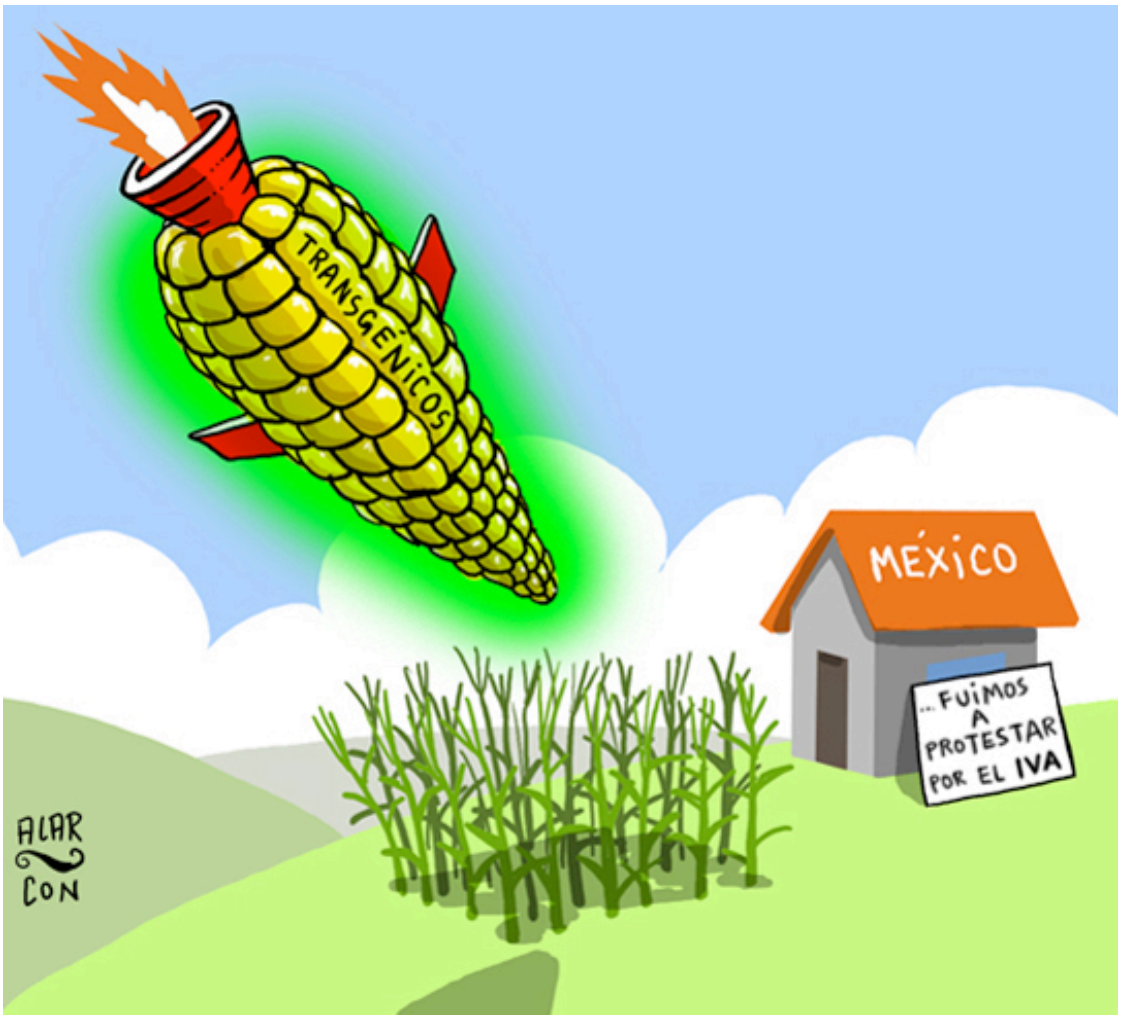

Figure 14.

Figure 15.

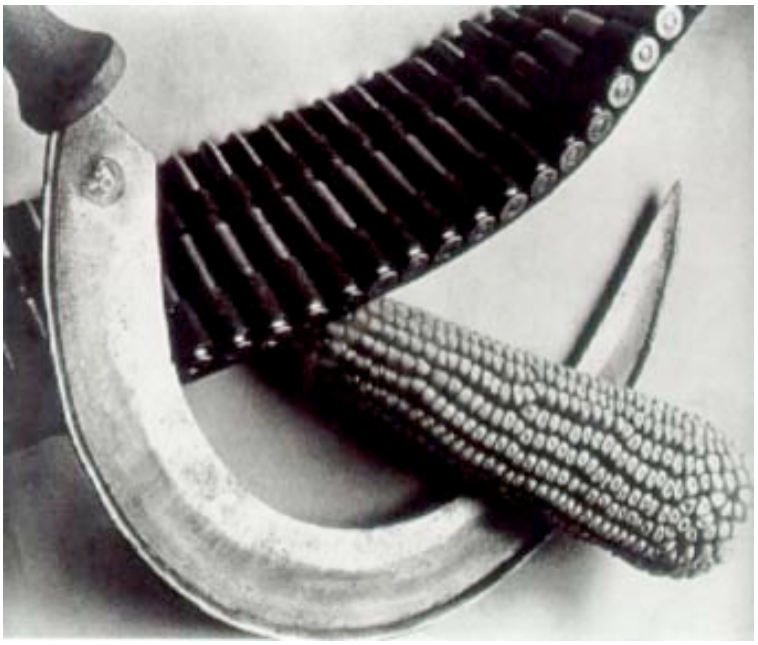

Figure 16a

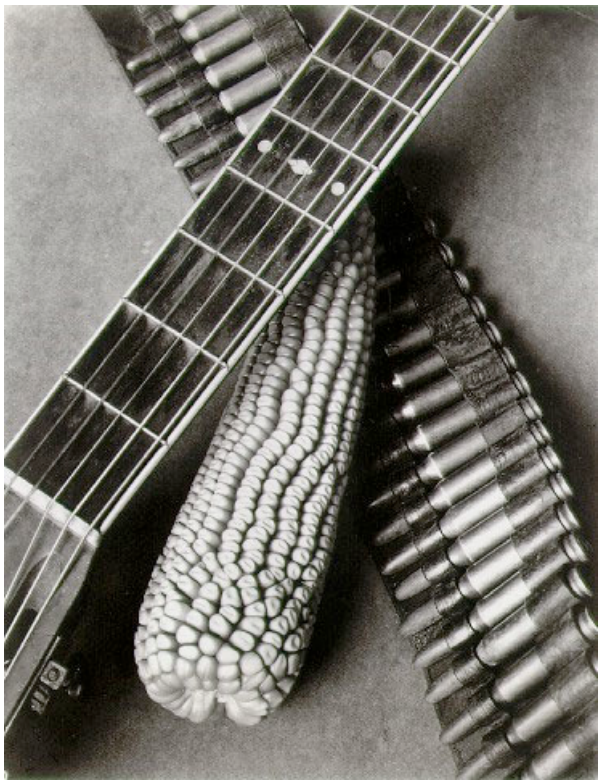

Figure 16b.


PUEBLO UNIDO
MÉXICO EN LUCHA
LA FUERZA DEL CAMPO
NOVIEMBRE 2008
RESPETO Y TRABAJO
flickr.com/photos/ponchosqueal

Figure 17.

Figure 18.

Figure 19.

Figure 20a

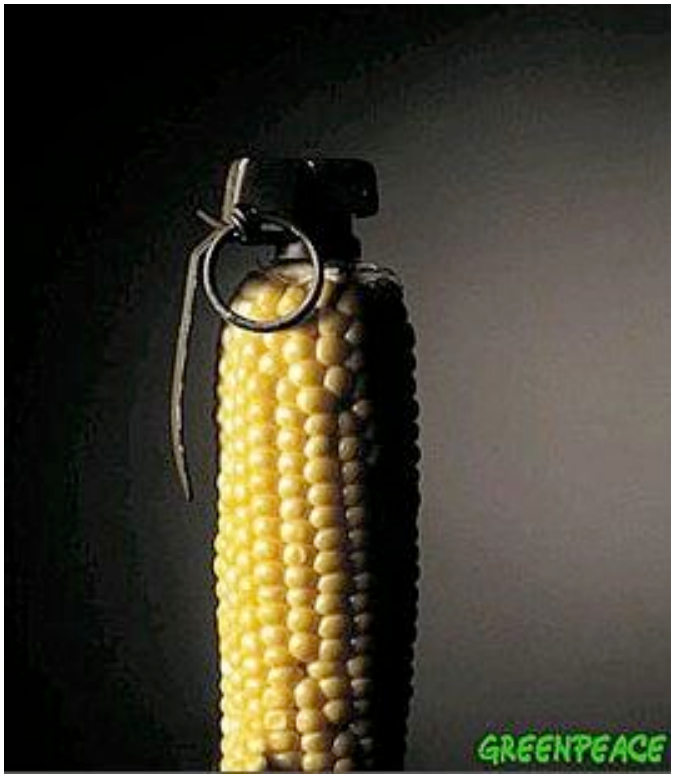

Figure 20b

Figure 21.

Figure 22.

Chapter Five

Mexican food sovereignty activists and their divide

Early in the evening of November 30th, 2007, the "*Galeria del Mural*" [ball]room of the Veracruzan Social and Cultural Center in Mexico City began receiving the guests invited to the celebration for the 30th anniversary of the Environmental Studies Group (GEA). The GEA had been one of the leading Mexican environmental organizations promoting the "Sin Maíz no hay País" campaign from its beginnings. Adelita San Vicente (an activist from the NGO *Semillas de Vida* who made my assistance to this event possible) explained that I should expect to find a wide array of activists from different organizations concerned with the introduction of GMO corn in Mexico's countryside at this celebration. The room for the event was decorated with pictures of corn borrowed from the National Center to Support Indigenous Missions (CENAMI) and a stand (also decorated with images of corn[107]) situated in front of few rows of chairs and round tables set up for the convenience of those guests interested in ordering drinks and snacks. The email invitation announced hors d'oeuvres made of native (*criollo*) corn along with mezcal, music, and dancing to take place after a panel presenting GEA's recent work. This work included publications as well as GEA's participation in the struggle for the "defense of Mexican food sovereignty and the reactivation of the Mexican countryside" (GEA 2007).

I arrived when there were only few people waiting for the start of the programmed activities. I had brought with me a small notebook which was in my pocket but was

[107] From the stage, a cheerleader frequently repeated the slogan during the celebration: "Without corn there is no country and without a project of nation it will be tough" (*Sin Maíz no hay País y Sin Proyecto de País esta Cañón).*

wondering if I would be able to take notes during the party without alienating myself from other guests. I ended up taking quick notes on napkins. A few minutes after my arrival I heard someone in the background say: "Jose, I see you are starting to hang out with the right people." Rafael Calderon, a professor I interviewed days before, was not only giving me a warm welcome to the party but also introducing me to the few people already in the room. I realized later in my research, however, that the perception of anti-GMO and food sovereignty activists as a united group of people was more wishful thinking than reality. In that day's celebration, I was already able to recognize how some leading members of the Network for the Defense of Corn (RDM) were avoiding leaders of the "Sin Maíz No Hay País" campaign (SMNP). Almost eight months later, in a forum organized by the RDM[108], Catherine Marielle, coordinator of the program of the Sustainable Alimentary Systems at GEA, expressed her perceptions of that divide and asked about the potential for combining the efforts from the SMNP and the RDM. Cristina Barros, a writer and activist with the SMNP also participating from the audience put it more explicitly:

> "In the SMNP campaign we are people of good faith and we were able to situate the topic of corn in a wide sector [of public opinion]. We did it with love, detached from any personal interest, and independently from past [sad or conflictive] histories in which some were protagonists. I hope we can look for a way to trust each other and unite. We are facing a common enemy. History shows us that we can only defeat that kind of adversary by being united. On the contrary, if we divide ourselves we make ourselves weaker. I offer what I can to serve as a bridge to help with whatever we might need to achieve this union, so that all our organizations can come together"[109]

[108] Forum: "For the Life of the People of Corn. Confronting the Food Crisis and the transgenes". Organized by the Network in Defense of Corn after their week-long national assembly: "The Seeds of the People, Tradition, Resistance and Future." July 2008.
[109] Transcriptions of Barros' participation in the Forum "For the Life of the People of Corn. Confronting the Food Crisis and the Transgenes." July 2008.

The tangible divide in the movement defending food sovereignty and resisting the introduction of GMO corn is significant from the activists' perspective as it is interpreted to be a potential cause for defeat in the struggle. While other scholars have discussed the work of the anti-GMO and food sovereignty movement from different angles, this division has not been analyzed as a problem emerging from the actors' different moral stand in which they take divergent actions in the face of prevailing neoliberal forces that confront their movement. Sykes asks "how do these top-down neoliberal attempts at reconfiguring relations inevitably present themselves as moral dilemmas for people on the ground by introducing contrary roles/duties/or ethics of acting?" (2009, p25). I argue that the example of Mexican food sovereignty activists sheds light on the ways in which advancing neoliberal forces impact the reconfiguration of activists' interactions by cornering them in moral dilemmas that ultimately set them apart. Even though the two main coalitions share common goals for their movement, their actions, responding to their divergent moral reasoning, distance them. I find Sykes's concept of 'moral reason' instrumental to understand those reconfigurations shaped by activists' decisions that, as with most decisions, shouldn't be seen only as the outcome of pragmatic *judgment*. Moral reason, Sykes explains, "is an inherently paradoxical term because it is made up of two words, morality and reason. Using the concept entails holding morality—a belief informing social action that depends upon convention or sentiment and has no basis in rationality—in tension with reason—a type of thought that demonstrates human ability to link language, logic, and consciousness to determine the terms or grounds of argument (…) Moral reasoning is an action that all humans do, largely because of the ambiguity of everyday life when values and beliefs are not shared, despite the sense that they live in a

world where all the places are said to join up" (2009, p.26). Those values informing moral reasoning in the interaction with people and things are "judgment[s] about the self [and things] in relation to another" (Sykes 2009, p28) When those judgments[110] and consequent actions diverge from *common* expectations, activists struggle with their ability for a single coalition. Mexican activists confronting the neoliberalization of their food systems found themselves in positions of taking decisions that, because reveal contradictory values, are seen also as hurting their movement. Their tolerance with the clientelism[111] of some campesino leaders or disregarding of *universal* scientific standards in claims of malformation of plants as a consequence transgene flow has given shape to a rift in the movement of activists confronting the threats to Mexican of food sovereignty. These activists however share a common dream of the Mexican future shaped in their interactions, in particular with indigenous and peasant and small-scale farmer groups participating in their coalitions. Their common imaginary of the future is portrayed by Toledo (2001, 2010) as that of an alternative modernity that embraces the rural *campesino* world (with values shaped by indigenous knowledge and the solidarity of communal life) not as backward stage but as space of prosperity, in which food production at small scale is profitable with autonomy and control over their food systems, without relying on the agro-industry (Bartra 2001). That vision of the future is akin to what Wittman calls agrarian citizenship (Wittman 2009). Activists agree that in order to achieve that alternative modernity they need to dismantle the neoliberal order that threatens campesino life. However, their means to that end diverge. I argue that despite

[110] Sykes (2009) points out that money is used not only to value things but also people themselves, and by those means (in the configuration of a common horizon) people connect to each other.

[111] Foweraker refers to clientelism as "the political culture of petitions and concessions in favor of popular projects and political confrontation." (1990: 16-17)

sharing that common future as a goal, their means to achieve it tell us about their different moral reasoning, which prevents them from forming coalitions. Nevertheless, many of their members collaborate with each other as individuals but not in the name of their own coalition.

According to Rogers (2008)[112], members of the SMNP campaign situate their resistance work in the context of broader Mexican social movements (including the EZLN movement) for the defense of indigenous farmers' rights. From her perspective, however, this movement uses corn as a "motivator for social change because it acts as a symbol within an international commodity chain" (Rogers 2008, p151). Focusing on corn, she points out that it is instrumental for activists as a case study and a discursive tool for explaining the impact of neoliberal policies in the life of indigenous farmers. On the other hand, however, activists of the SMNP find themselves educating the indigenous farmers, because, as Rogers explains, citing Salvador (the press and communication coordinator of ANEC): "whether they live in rural or urban areas, there is a lack of knowledge in general" (Rogers 2008, p.145-146). In that context, Rogers explains that the educational task (informing about GMOs and free trade) of the movement that defends indigenous farmers' rights is needed in order "to gain support for their causes" (Rogers 2008, p.146). Rogers, however, only refers to the SMNP campaign (besides the Popular Assembly of Oaxacan People or APPO[113]) and thus she does not differentiate between the different groups involved in the defense of food sovereignty and resistance to the introduction of GMO corn in Mexico.

---

[112] Rogers, J. B. (2008). *The ma(i)ze of globalization: Free trade, gender, and resistance in oaxaca.* University of California, Santa Barbara).

[113] APPO is a movement that emerges from the mobilization of Oaxacan teachers unions in 2006 and gain wide popular support in the face of violent state repression.

Kinchy (2007) however, explains that the opposition to genetic 'contamination' is a main common ground for different individuals and action groups. She understands this common ground as a frame constructed with ideas that, "emerge through interactions between diverse individuals and groups, including NGOs, grassroots activists, and experts, who may interpret their situations through diverse sub-frames"(Kinchy 2007 p.23). Some of those sub-frames as she mentions can be in tension with the position of the common ground[114]. The defense of corn seen as the defense of indigenous rights that Rogers explained to be a central element in the SMNP movement is considered by Kinchy in her study to be one of those sub-frames under the umbrella of anti-GM resistance. The tensions in Mexico mentioned by Kinchy, however, limit the articulation and alliances of activist groups such as those participating in the SMNP and the RDM. In this case, tensions are interactions that can provide ideas, although they are not necessarily appropriate for the construction of a common ground. Attention to these tensions among the Mexican anti-GMO activists is particularly important since, as members of the SMNP campaign explain, when they separate their work as activists, they weaken their efforts to defend Mexican food sovereignty.

Kinchy's dissertation research, conducted before the formal constitution of the SMNP campaign, refers also to these two groups of activists since she identifies a second group (the first one being the RDM) as composed by "a network of environmental NGOs" (p. 153, 2007) that later will be consolidated as a coalition that included small and medium scale farmers, peasants, and indigenous organizations. She suggests the difference between these groups is based on their perceptions of political opportunities to

[114] Some of those sub-frames, according to Kinchy, include: 1) worries about maintaining biodiversity and the future seed supply, 2) food safety concerns, 3) ethical and cultural objections to genetic engineering 4) intellectual property issues and other concerns about corporate control of agriculture.

influence policymaking. Kinchy points out that RDM perceives these political opportunity structures to be closed after a failure to push for new legislation with citizen science[115], while the SMNP campaign still considers it possible to produce changes at the State level. That new legislation would ban the planting of GMO corn, regulate the importation and exports of corn and beans (which means taking those products out of NAFTA), and would protect local, small scale systems of food production and consumption with an emphasis on food sovereignty instead of food security.

I argue that the different moral reasoning of these coalitions set them apart. Certain historical events fuel the distrust against the government in one of the coalitions and not the other (with more access to State authorities), however, they also constitute moments in which their different moral reason become explicit. Those moments expose the actual practice of some of their leaders as occasionally deceptive for some activists. They also expose the changing position of activists in the struggle with regards to their leaders. For some participants, the defense of food sovereignty is part of the struggle moved by an alternative vision of the world of activists (inspired by the ideal[ized] solidarity of indigenous communal life) in which there is no room [or tolerance] for concealing clientelist relations between the State and their leaders. For others, the ideal is expected to be achieved in the long term and those questionable relations are tolerated in the short term.

I will discuss the processes and outcomes of the following set of mobilizations for the negotiations between activists themselves and with the Mexican State: The negotiations for the modification of Article 27 of the national constitution in 1992; the

[115] Kinchy calls citizen science the "activist-initiated processes of data collection and analysis" (2007, p.6) conducted by Oaxacan farmers and NGOs to test the extent of the GMO contamination of native varieties of corn.

National Agreement for the Countryside (ANC) in 2003 after the movement "The Countryside Cannot Bear it Anymore" (*El Campo no Aguanta Mas*); the controversy of the Biosafety law for Genetically Modified Organisms law passed in 2004 by the house of representatives with the questioned participation of food sovereignty activists as state representatives; and the discussion regarding the RDM's claims of malformed corn plants as proof of GMO contamination.

1. Without Corn There is no Country campaign (SMNP)

In June 2007[116], important public figures and 300 peasant and environmentalist organizations, along with civil and human rights activists and unions officially launched the "National Campaign in Defense of Food Sovereignty and the Revitalization of Mexican Countryside: Without Corn there is no Country, Without Beans either, Put Mexico in your Mouth!". The members of this campaign, recognized two historical antecedents: a National Forum for Food Sovereignty that had taken place in Mexico in 1996, two years after the start of NAFTA and the movement "The Countryside Cannot Bear it Anymore" (*El Campo no Aguanta Mas*), which was formed in 2003. In the Forum, the *campesino* organizations and Mexican NGOs had similar demands to those of the SMNP campaign, requesting the renegotiation of NAFTA, the protection of the national corn and bean production, and the safeguard of Mexican food sovereignty, rooted in local and sustainable rural production, by declaring nourishment a constitutional right. A central concern in that forum was the impact of the implementation of neoliberal policies on the ability of Mexicans to control their national production and consumption of food.

[116] That date was six months before the full application of NAFTA in Mexico, which meant lifting all remaining safeguards on Mexican agricultural products.

"The Countryside Cannot Bear it Anymore" (MECNM) was a national movement of peasants and farmers, also with similar demands, that, after mobilizations in Mexico City, was able to "force President Vicente Fox to convoke a national dialogue with *campesino* organizations and other groups of civil society connected to the problems of the peasantry" (Sanchez et al, 2008 p.5). The MECNM was initially led by the National Association of Rural Commercialization Enterprises[117] (ANEC), *El Barzon*, and the National Union of Autonomous Regional Peasant Organizations (UNORCA). The effectiveness of this movement in creating opportunities for negotiation with the government became a referent for more recent farmer and peasant mobilizations such as the SMNP campaign. As I discuss later, however, the process followed in the negotiations and the role of some of their leaders afterwards represented one reason for the divisions of food sovereignty activists.

In 2007, the main demands of the SMNP campaign were the renegotiation of NAFTA with the goal of taking corn and beans out of the free trade agreement, the declaration of Mexico as a country free of transgenes, and the legislation of public policies to improve the conditions of farmers in the countryside. Mexican food sovereignty was (and is) the central objective of these activists. Their practices are oriented to attract favorable public opinion to their cause and to inform citizens about the impact of NAFTA policies on Mexican agriculture and the peoples' ability to control the food they grow and eat. Different from the RDM, they have been very outspoken, they appear in the media, including newspapers, Internet, TV, and radio. They also have directly targeted the congress not only with demonstrations within the congress building

[117] National Association of Rural Commercialization Enterprises (ANEC) is a Mexican association of medium size and small producers of grains who own land. They look for ways to have direct access to the agricultural markets without relying on the already hegemonic agro-food industrial complex in Mexico.

and conference rooms, but also with support from members of the Democratic Revolutionary Party (PRD) in policymaking. Victor Suarez, director of ANEC and a congressman for the PRD from 2003 to 2006, is one of the main leaders of the SMNP campaign. The leader of the PRD and former presidential candidate, Andres Manuel Lopez Obrador has also publicly endorsed the SMNP campaign in his speeches.

Other SMNP practices are press conferences, presence in the media via interviews, demonstrations, festivals, and rock concerts. In their demonstrations, they count on the participation of public figures such as famous Mexican film and TV actors that engage, for example, on symbolic planting of corn and collaborate in their concerts. The campaign has also attracted the attention of the press and citizens with massive marches, caravans, sit-ins and fasting in public spaces, and symbolic blockades of the border crossing bridge in Ciudad Juarez, between USA and Mexico.

The coordination of most of SMNP activities is mainly done by organizations located in Mexico City with the participation of leaders from farmers and indigenous organizations. Among them, GEA, ANEC, and *Semillas de Vida* played important roles in the coordination of the campaign and articulation of different activists groups. Oxfam has provided funding for some of their activities and Greenpeace Mexico has been an active participant in demonstrations and media campaigns. Since 2008, they have been working on strengthening their national network of farmer, *campesino,* and indigenous organizations, and their ties to environmentalist, and human right activists. The campaign has been divided into five areas: public policy, nutrition, transgenes, sustainable agriculture, and communication. Among their actions, they declared September 29th the National Day of Corn, which has been celebrated in Mexico since 2009. In 2010, the

SMNP campaign has also started workshops oriented to training journalists and correspondents writing about agriculture[118]. The SMNP campaign focuses most of its efforts on informing the public in order to build support for putting pressure on state and federal authorities.

The visibility aspired by the SMNP campaign contrasts greatly with the efforts of the RDM that favors work in rural communities instead of activism in urban centers and the use of media.

2. Network in Defense of Corn (RDM)

On the first morning of the 2008 Assembly of the Network in Defense of Native Corn "Seeds of the Peoples, Tradition, Resistance, and the Future," [119] organized by the Network in Defense of Corn, Alvaro Salgado (a member of CENAMI[120] and leader at the RDM) opens the event explaining to the audience (mostly indigenous farmers from around the country) that in order to be part of the network "you don't need to be affiliated or be part of any [institution], you just need to be people of corn" (Salgado 2008). He also mentioned that it was the seventh year in which the RDM had been discussing the problems related to the threat GMO corn posed to Mexico and ways of resisting it. However, he pointed out that "the resistance didn't start seven years ago; rather, we have always been resisting" (Salgado 2008). As he explains, the Network's approach to the

[118] Interestingly, one of the leaders of those workshops was Lourdes Rudiño, a journalist at "El Financiero" that years before was granted a journalist award offered by AGROBIO (an organization that bring together organizations interested in the promotion of biotechnology in agriculture. Among its members are Monsanto, Syngenta, and DuPont-Pionner) and attended several training international events organized by the biotech industry.

[119] This is an annual event organized by the Network in Defense of Corn. The workshop itself is usually an event not openly advertised to the public but only for invited participants, usually small and medium scale farmers, peasants, and indigenous people. The event ends with a public forum advertised in the press and open to all.

[120] 'National Center to Support Indigenous Missions'

problems of corn recognizes the reality of life as a whole, in community, and for that reason the problems they discuss are approached from an "integral perspective" in which the parts are not separated from the whole.

While this annual meeting is a central event for the RDM, other activities such as workshops in Mexico City or in the participants' rural localities maintained the vitality of this network during the last decade. Formally established in 2002, the Network in Defense of Corn engaged in the debate about the risk of GMOs in Mexico after the discovery of transgene flow in the Sierra Juarez of Oaxaca. However, the discussion of the potential impact of biotechnology on Mexican corn agriculture was already ongoing among Mexican scholars since the mid-nineties. The discovery of transgene flow in Oaxaca in 2001 and the ensuing efforts to conduct tests on corn with communities' and farmers' participation became instrumental for the RDM in the formation of a coalition between indigenous and farmer organizations, environmental NGOs, and rural communities (Kinchy 2007). Multi-sited citizen's science (popular biology, as Kinchy calls it) across communities provided the RDM with the means of not only collecting samples in remote locations but also maintaining, afterwards, a network for continuing popular education regarding Mexican politics of corn agriculture (Kinchy 2007). The conclusion of their citizen-driven research recognized the extended transgene flow in Mexican milpas and confirmed Chapela's findings published in the journal Nature in 2001. Despite the significance of their findings, their research didn't have the expected impact of influencing Mexican policies regarding the entrance of GMO corn in to Mexico. Kinchy argues that RDM's failure to influence policymaking with their research findings was the reason for them to focus on grassroots activism instead of continuing fighting in

the arena of public policy (2007). Salgado however, also identifies subaltern groups' deep historical distrust of the Mexican State and public institutions as a reason to work on activities of resistance at a micro-level with a focus on communal self-sufficiency in rural areas instead of targeting the State to promote, for example, changes in legislation. That focus on the micro-level activism through small-scale agro-ecological practices as resistance became the main approach and strategy of the RDM: to confront not only the introduction of GMO-corn but also the expansion of neoliberal endeavors in the Mexican countryside. The deafness of the government regarding the activists' findings of transgene flow was interpreted by the activists as part of that continued history of marginalization of small scale, and in particular indigenous farmers. Also key for that micro-level approach was the experience NGOs involved in the Network had working at a community level and their good rapport with farmers.

Explaining her strategy for confronting the risk of transgene contamination, a farmer working with UNOSJO (Union of Organizations of the Sierra Juarez of Oaxaca), an institution participating in the RDM in the Sierra Juarez, told me, "We have to build a fence ('*Debemos formar un cerco'*) against the arrival of foreign seeds" (interview 2008). That fence, as a strategy, recalls the approach promoted by the RDM within communities and put into practice through workshops encouraging small-scale agriculture with the use of local seeds and traditional campesino techniques of cultivation while banning imported seeds at a community level. Their emphasis is put on food sovereignty and self-subsistence first, instead of food security. A key element in the RDM work is the revalorization of *campesino* identity in connection to their land, history, and agricultural practices. The RDM does not discourage large-scale agriculture but points out the

disadvantages of losing autonomy of food production by depending on the market. Farmers practicing corn agriculture at a larger scale in the north of Mexico participated in the 2008 workshop and exchanged experiences with small-scale producers. The information they provided was focused on the disadvantages of depending on the circuits of the agricultural market in the context of NAFTA and their views of a lack of cultural identity in the form of indigenous language and traditions. One larger-scale farmer told other participants during the event: "I envy you guys, you know where you are coming from, you have your own language, we don't know it, we lost track of our origin." (Transcript 2008). That statement was well received by other participants, *campesinos* and indigenous people from diverse regions of Mexico. Among them the *huichols*, like the other participants, recognized the sincerity but also the misfortune expressed in that testimony.

A strategy of local resistance is described by the RDM as sharing information based on "results of *campesino* observation, local processes of resistance to transgenes and the real life experiences of people and communities of corn" (RDM 2008, p.1) The RDM's interest in sharing local information about "processes of resistance" is oriented to reproducing experiences and local practices of self-sufficiency that in many cases involves the transmission of traditional knowledge, such as agricultural techniques or the recognition of plants (lately considered as a weed for some) as indigenous medicine forgotten or never before used in the communities of participant farmers. This dialogue included also sharing negative experiences with State programs aimed to increase rural productivity. For example, at this event (as in other spaces where members of the RDM made public their view of the role of the State regarding scale farmers production) the

RDM pointed out the negative impact of State agricultural programs such as the "Program of Corn and Beans" PROMAF. They described this program as one of substitution of seeds that would end up in losing native corn replaced by improved seeds and maybe in the future by GM seeds. The reinforcement of *campesino* identity through material practices such as the performance of traditional medicine and agriculture are strategies of resistance that differ greatly from those of the SMNP which focused mostly on influencing urban public opinion in order to affect policymaking at state level.

Included in local strategies of resistance, the RDM aspires to provide *campesinos* with tools for observation of GMO contamination without depending on the expensive expertise of scientists. However, their attempts of making visible the thus-far invisible GM flow created a conflict with scholars and groups of activists affiliated to the SMNP campaign.[121] As Salgado explained to me, members of the RDM found a shaman with the ability to identify which plants were contaminated by GM corn. His ability of recognizing contaminated corn was highly correlated with the results of scientific tests (Salgado 2008). When I asked him for the possibility of interviewing that shaman, Salgado told me that they prefer to keep the shaman's identity protected. Salgado suggested his expectation of finding ways to transmit that shamanic knowledge to people from other communities in the future.

Members of the RDM also attempt to make visible the invisible transgene flow by identifying cases of what they call "malformed corn plants." This practice is promoted by the NGO members of the RDM as part of what they call "*campesino* observation" despite of scientist activists' refutation of that direct connection between transgene flow and

[121] I will discuss later in this chapter the conflicts related to that strategy.

deformation of corn plants. Not only scientists, but also some farmers I interviewed recognize that malformed corn plants are not new but can be the consequence of different factors such as diseases or scarcity of nutritious elements in the soil. Nevertheless, biologist Flor Rivera, working at CECCAM, was planning, in 2008, to focus her graduate studies on research aimed at proving and identifying connections between malformation and trangene flow. Kinchy highlights the instrumental role of malformations in the hands of the RDM for the purpose of "teach[ing] campesinos about genetic engineering" (2007, p.162), even if until today they can't scientifically prove that connection and publish it in a scientific journal. For them to publish can also mean "to make public" even without scientific evidence. (Kinchy 2007).

3. Tensions of moral reasoning

While the coalitions of the RDM and the SMNP have not created a formal alliance, some of their members do collaborate with each other in specific activities, such as round tables, expositions, or conferences. When I asked Salgado early in January 2008 if the RDM will support the "mega march" of the SMNP campaign, he told me that even though they don't usually support SMNP demonstrations they will join this time since they considered it strategically significant. Many of the indigenous and farmer organizations members of the RDM were planning to attend the march. Despite those particular circumstances that brought them together, there is a divide that shaped these groups as coalitions that prefer (in particular from the side of the RDM) to maintain distance from the other.

In response to SMNP's inquires about forming a coalition, Luis Hernandez Navarro, a Mexican political analyst collaborating with CECCAM (a collaborator at the

RDM), explained in the national forum of the RDM that the struggle has a history that is not forgotten:

> The unity and disarticulation of the [struggle] is a polemic topic. I think it is not enough to simply express one's hope. We have a history [that explains the divide]. In 2003, when the movement "The Countryside Cannot Bear it Anymore" was formed, a very relevant part of the indigenous movement didn't want to participate in it. Among several arguments they offered, was that the leaders participating in that movement were the *campesino* leaders who signed and approved the reforms to Article 27 of the Mexican Constitution. That was true. Many indigenous leaders also said: 'What do they need us for? To help them to become members of congress?' And then we saw what happened. We saw the agreement [after the Countryside Cannot Bear it Anymore movement] had several things agreed to that were not fulfilled, and some of those leaders, a few of them, became State representatives. And, during their time as State representative – this is very important because it is part of the distrust-, many of them did not oppose the 'Monsanto law.' They abstained from voting [against it]. What does that mean? Many of the State representatives of the PRD approved the Monsanto Law, and senators of the PRD approved the Monsanto Law, so now we are telling the people who don't trust them: 'lets get together again.' For what? To become a State representative in 2009. This is a big problem, a history of huge distrust. Those same representatives (…) talk against that law when they are in front of the public, with the campesinos, but in the moment of truth [of decisions] representatives such as Victor Suarez didn't vote against the Monsanto Law." (Hernandez 2008)

Hernandez points out a history that goes back to 1992, two years before NAFTA, when the Mexican Federal government changed Article 27 of the national constitution. That modification lifted the restrictions that protected rural communities (*ejidos* and *comunidades*) from fragmenting the communal ownership of their lands. That constitutional reform was aimed at modernizing agriculture and allowing urbanization in rural areas located near growing urban centers by enabling farmers to sell their lands. However, some of the most significant consequences of that reform were the concentration of large extensions of land in a few hands, the dissolution of communal forms of work, unequal competition between small-scale producers and corporate

landowners, the proletarianization of peasantry, and the increase of migration to urban areas and the USA. Indigenous and campesino leaders[122] that had signed and legitimated the constitutional reform in 1992 resurfaced in 2003 as leaders of the 'Countryside Cannot Bear it Anymore' movement (MECNM) with demands critical of the constitutional reform and the impact of the neoliberal turn in Mexican agriculture. While that movement was able to attract the support of the public and brought the government to the negotiating table with *campesino* leaders, the National Agreement for the Countryside (ANC) [123] signed by them and the government not only was not fulfilled by the government but its leaders agreed to a significant compromise relinquishing "the original core demands such as the definitive exclusion of corn and beans from the process of liberalization under NAFTA" (Rubio 2007, p.20). Activists critical of the outcome of these negotiations saw the final agreement as a list of vague promises made by the government. They pointed out that this was a consequence of the refusal of campesino negotiators to pursue their core demands, which were aimed at a structural change in the neoliberal State and towards a politics of redistribution of resources (Rubio 2007).

[122] They were grouped under the Permanent Agrarian Congress (CAP) an organization formed in 1988 with support from the government and the recently elected president Carlos Salinas de Gortari. Salinas de Gortari was also responsible of the negotiation and signing of NAFTA. This is not an uncommon practice in Mexico since previous presidents had also promoted the formation of campesino organizations. In that way the state was able to channel popular discontent and, in many cases, stablish relations of patronage as a means to mitigate social unrest.

[123] The ANC is the final agreement signed (in April 28, 2003) after the mobilizations of the MECNM, and after more than a month of round-table discussions between representatives of campesinos and the government. Campesinos proposed the "Campesino Plan for the 21st Century" that required from the government a focus on a "politics of protection and promotion of the countryside, productive diversification, as well as social support to achieve rural sustainable development" as a means to achieve national food sovereignty (Mestries 2007, p.216-217). The substantive demands of the farmers were the renegotiation of NAFTA and the modification of the article 27 of the federal constitution. Those demands implied structural changes of national policies that the government left out of the final agreement.

Despite that, the current SMNP campaign identifies the MECNM as one the most important inspirations for the defense of corn and Mexican food sovereignty[124]. However, a sector of the indigenous and *campesino* movement such as the National Indigenous Congress does not forget past betrayals and declines to collaborate with the SMNP. They maintain their affiliation with the RDM and, while they share coming goals, there is still a significant divide between these groups.

Concheiro[125] and Diego (2007), explain that the MECNM was a complex process because it was a coalition of disparate groups of rural producers with different interests brought together by common demands. He argues that a key achievement of that movement was its ability to bring the rural concerns into the urban arena and subvert the habit of the neoliberal State to relegate social concerns to the realm of citizens' responsibility (2007). According to Concheiro and Diego, the MECNM forced the State - as interlocutor of the society, not the State leaders themselves- to sign an agreement that went against the grain of neoliberal ruling principles[126]. That understanding of success was recalled by the organizers of the SMNP campaign as an ideal political opportunity that they wanted to see repeated in 2008. Detractors, however, regarded that movement as a few campesino and indigenous leaders' opportunity to refresh their clientelist relations with the government by displaying popular power against the State. Concheiro shed light on a difference between these activists when responding to the critiques raised by Nadal and De Ita[127] to the MECNM, critiques similar to those of Hernandez quoted above. He

[124] Activists not only expressed that connection but also planned their demonstrations in January 2008 to mirror the MECNM demonstrations of January 2003.
[125] Professor at the UAM and collaborator of the SMNP.
[126] Concheiro and Diego argue that the MECNM is comparable to the EZLN movement in the sense that it questions the structures of the neoliberal modernity imposed by the state (2007).
[127] Member of CECCAM, organization affiliated to the RDM.

considered the approach of activists who decided not to negotiate agreements with the State to be a comfortable position (mostly a scholarly approach from his perspective), a self-exclusion that ends up reinforcing the position of a State promoting a neoliberal agenda (2007). Concheiro's approach resembles the view of the SMNP activists who also consider that even though MECNM activists negotiated with the state in the short term in order to benefit their own constituencies, similar to the unions' approach, they were, on the whole, challenging the neoliberal state project of nation.

However, critiques of the MECNM are coming not only from scholars but also from indigenous activists such those at the Indigenous National Congress (CNI). As Marco Sarmiento, a leader at the CNI, explained to me, indigenous people and peasants in the RDM cannot trust those leaders that already betrayed them and for that reason they cannot form alliances with them or with the State (Sarmiento 2008). That approach reveals a moral reasoning different from that of the SMNP campaign. In contrast to Kinchy, who argues that the RDM focused on the grassroots activism[128] because it failed to influence policymaking at federal level with citizen's science, I contend that that decision was influenced by those activists' moral reasoning, by which there is no room to negotiate with deceptive allies or opponents[129]. Other examples of that moral reasoning are found in the application of internal rules within indigenous rural communities and their ways of interacting with the State.). Concheiro suggests the central role of moral values for the relation between actors in the MECNM when he explains that "the division in the moral force of the movement weakened its power to maintain its political

[128] By what she means micro level activism with peasants and indigenous in the countryside.
[129] It is also important to realize that the attempts and failure to influence public policy with the results coming from the citizen's science efforts collecting samples of transgene flow in Mexican countryside was not that far in time from the time of the negotiations between the MECNM and the government.

initiative" (2007, p. 53). While he refers to the impact of clientelism between the State and some activists leaders in the evolution of that movement, he also implies a moral divide between those who support the movement despite the questionable decisions of some of their leaders, and those who decline to participate for those reasons. Clientielism, a political practice widely used decades ago by previous governments to control the margins of the Mexican state through patronage with local authorities, is still used to promote the expansion of the neoliberal state. Its widespread use turns it into a political format that actually erodes the basis of democratic processes aspired to by national social movements. However, as Hellman explains, not only official party organization but also opposition movements "fall (…) into the logic of clientelism" in Mexico in attempts to achieve their goals (1994, p.126). Moreover, she points out that "Although the emergence of a new [social] movement may challenge the old PRI[130]-linked networks based on local caciques, it undermines the control of the caciques only by replacing the old networks with alternative channels that, generally speaking, are also clientelistic in their mode of operation" (1994, p.127). Audelo refers to two kind common clientelist exchanges committed by the CNC (National Campesino Confederation) as examples of this practice in Mexico: "1) the CNC offers the PRI a number of votes (…) for the following elections, The PRI gives in exchange food coupons for its militants 2) the CNC offers the government a good disposition to sign agreements about agrarian politics, rewarded by the government authority with a job position for the son of the CNC leader in the state public administration" (2004, p. 135). The CNC had a relevant role in the

130 PRI stands for Institutional Revolutionary Party. This political party (founded with a different name) was in power in Mexico from 1929 to 2000.

MECNM however it had a deceptive role supporting the position of the government in the National Agreement for the Countryside (ANC).

The SMNP, which considers the MECNM to be an antecedent of its campaign, prefers to reconcile (and to some extent conceal) instead of confronting the contradictions in some of its leaders' and allies' actions, such as, for example the role played by Victor Suarez, ANEC leader, (also a protagonist of the MECNM who signed the ANC) when, as state representative, he did not vote against the biosecurity law aimed at regulating the introduction of GMO seeds in Mexico[131]. Their approach allows for those contradictions in the long term as long as the movement is seen as moving forward to their ultimate goals of pushing the State to prioritize food sovereignty and the rights of the people in the countryside over the interests of the agro-food industrial complex. They justify those questionable decisions of the movement leaders, for example, in the case of the biosecurity law, as necessary decisions, not a contradiction, since it was a small step (however not the last one) toward controlling GMOs in Mexico. The RDM however, does not give room for those contradictions in its coalition since as Joaquin Jimenez explained, "you cannot trust those who have already deceived you" (Jimenez 2008). From their perspective, supporting those leaders defeats the purpose of the movement itself.

The divide has also been deepened, as Kinchy (2007) explains, due to scholars' and scientists' (who afterwards collaborated in the SMNP campaign) critique of the RDM use of malformed corn plants to illustrate physical consequences of transgene contamination. With no scientific evidence of the connections between transgene flow

[131] Suarez has been accused of clientelism to explain his unexpected declination to vote against the biosecurity law.

and deformation of plants, those activists are seen as discrediting the entire anti-GMO movement. Even though NGO members of the RDM themselves recognize the lack of scientific support for their claims, they still do it as a form of making visible transgene flow for the population of rural communities. When I expressed my interest in this topic to a professor at UAM she called those who used malformed plants to claim corn contamination "*amarillistas*"—"yellows" (as in a "yellow" press)— since she considered their claims to be sensationalist and aimed at increasing their own visibility. Gustavo Esteva, a scholar who collaborates with the SMNP campaign, also refers to the NGOs' use of malformation claims as opportunistic (Kinchy 2007).

From the RDM perspective however, those claims are needed in the short term due to the risk perceived in transgene flow. For them, it makes no sense to wait for years until it is too late, as they put it, and scientists are able to find out that activists were right. Biologist Flor Rivera's future graduate studies, as she enthusiastically explained to me, will be aimed at finding that still unveiled connection by means of science (Rivera 2008). In the meantime, activists of the RDM consider it morally acceptable to claim connections between cases of malformed corn plants and transgene flow, even though they recognize that there is no scientific proof so far. Aldo Gonzalez, from UNOSJO and an activist at the RDM, explains:

> "The problem with the scientists is that they need to have proven information to fall back on. We, well, we work in a different way and what interests us is to share information that enables people to make decisions quickly…This information isn't useful if we don't circulate it right now" (Gonzalez 2006, in Kinchy 2007, p.159)

Gonzalez's pragmatism exemplifies the approach applied by NGOs of the RDM and criticized by scholars and scientists at the SMNP campaign. In the face of the argued

limitations of scientific knowledge and the urgency of acting, their justification bypasses the rigor of the scientific way of knowing practiced by the other coalition. The urgency of acting for the protection of corn as a central value in the life of indigenous farmers places in perspective the moral reasoning of activists that refuses to follow procedures of a science they don't have access to and which delays an opportunity to make [horrifically] visible the consequences of GM contamination in their milpas. The activists' need for visibility of GMO corn effects in the short-term situates them beyond the fringes of what is morally acceptable in a realm of scientific accountability. These activists defend a higher value with a pragmatism that bypasses the need of science. However, as Kyles (2009) explains these decisions cannot be understood only as pragmatic actions but also as decisions in which reason and morality intersect. That act of valuing is a ground for [*dis*]connecting as it ultimately is a measure of the self and others. As Salgado explains, the RDM (different from the SMNP) approaches the problem of corn from an "integral perspective" in the context of reality of life [of the people of corn] relations in which the parts are not separate from the whole. From that approach, clientelist practices cannot be isolated from the construction of the ultimate goal of people's sovereignty over their food systems. Similarly, the steps of science are seen as limited in providing immediate tools for what activists identify to be an urgent problem. This approach goes beyond the ideals of constructing agrarian citizenship shared by both coalitions. In the face of the expansion of the agro-food industrial complex in Mexico, food activists' differences in valuing scientific testing of transgens and tolerance to clientelism not only set them apart but the rift between them enable the advance of neoliberal policies, such as the biosecurity law that creates the possibility for legally growing GMO corn in Mexico.

The tensions between the SMNP and RDM have prevented them from constructing a major alliance that could articulate strategies of resistance reaching both the rural and urban grassroots as well as effectively targeting government authorities to influence agrarian policymaking. That is the weakness that Cristina Barros referred to in the forum "For the Life of the People of Corn. Confronting the Food Crisis and the transgenes" organized by the RDM in 2008 when she offered her help to unify the movement of food sovereignty activists. As she pointed out they needed to work together to confront their "common enemy." While the movement, divided, struggles to defend Mexican food systems, the Mexican Secretary of Agriculture (Sagarpa) and Secretary of Environment and Natural Resources (Semarnat) have been giving authorizations to plant GMO seeds in several Mexican regions (regulated by the biosecurity law) without a strong opposition. The government "Alliance for the Sustainable Growth of Agro-Business in Mexico" signed recently with Monsanto, Walmart, Nestle, Coca-Cola, and Pepsi, among other transnational corporations to "improve food production in Mexico (...) [with] a new vision of the agriculture" (CNN Expansion 2012) is just one more example of the advance of the neoliberalization of food systems in Mexico.

Conclusions

This study brings together five different but parallel and interconnected plots regarding the struggles against the ongoing naturalization of the neoliberal food regime in Mexico. In each chapter, I analyze ways in which that regime works towards its stabilization and how different actors attempt to disrupt it and to propose a different arrangement of the world. That alternative vision (shared by the SMNP and the RDM) focuses on food sovereignty instead of food security. It also advocates sustainable small scale-agriculture with a revalorization of campesino practices and indigenous knowledge instead of intensive practices of food production with the concentration of control of the chain of supply led by the agro-food industrial complex.

I focus on corn because its industrial production (and in particular the introduction of transgene maize in the Mexican countryside) is central in the discussions about the transformation of Mexican food systems. Being a food crop of historical, cultural, and economic significance in Mexico, corn became a terrain for material and symbolic resistance to the agro-industrial food complex as a whole. The relevance of corn for that resistance is evident in the common characterization of growing GMOs in Mexican milpas and its far-reaching implications for the transformation of production and consumption, as a threat to the life of "the people of corn".

A material dimension of those transformations involves the intervention of capital aimed at ensuring the ability of controlling every aspect of food production to eliminate uncertainty and increase productivity. The flourization of tortilla, the application of imported fertilizers and improved seeds recommended by agriculture technicians in rural communities, and the recent authorizations for GMO planting (however not for

commercial purposes yet) are examples of different forms by which the industry aspires to tame natural processes and to control the food market. Large-scale mechanized production of corn, reduced perishability of powdered masa nixtamal and highly mechanized production of tortillas are forms that Kloppenburg (1988) recognizes as a "process of differentiation." This process is a key element in the indirect extraction of surplus value not only from the labor of the farmer but also from the workers of the industries that provide the inputs and machinaries to the agro-industry and tortilla industry. As I argue in chapter three, that surplus value is also extracted from the taming of consumers' habits, such as, for example, their taste, since they had to adapt to the transformations in the flavor and the texture of tortillas in their everyday meals. Goodman et al. (1987) and Boyd et al. (2001) explain us that the industry even attempts to fully tame natural processes involved in the production of food (or agriculture for other industrial goals). For Boyd et al. (2001) fertilizers and genetic engineering in agriculture are cases of formal (the former) and real subsumption (the latter) of nature, in which capital is able to "take a hold of and transform natural production, and use it as a source of productivity increase" (p.557).

Chapters one, two, and three show that these material interventions in the Mexican food systems also require interventions in the cultural and social realms of urban and rural citizens, consumers and producers. Neoliberal capital needs to stabilize its material transformations of food systems by also reconfiguring peoples' ways of relating to each other, as well as ways of eating (corn), listening and writing (about industrial agricultural technologies, including GMO corn), and remembering (the social history of corn and tortilla). In that dimension, citizens; small scale farmers, journalists,

tortilleros, and families at the dinner table are the target of attempts to normalize new technologies that increase the agro-food industries' surplus value.

Chapter one presents the forms by which farmers in the Sierra Juarez of Oaxaca, especially in Yavesia, make sense of imported agricultural technologies. Representatives of the state and NGOs provide training in more productive technologies, monitor farmers' practices--some even offer microfinance loans--and teach marketing skills with the promise that eventually they could even access the global market[132]. Workshops, however, provide instruction not only on farming technologies but also on technologies of self-improvement. Their teachings champion entrepreneurial success as a form of adulthood in the world. That success requires the performance of an economic rationality that recognizes in the community a market and in neighbors and relatives potential customers. Following the logic of comparative advantages at a global [market] scale, they teach, farmers would do better by substituting their local seeds by improved seeds with regional urban food markets in mind. The global is present in the Sierra Juarez in many other ways, among them, a repetitive one is the delivery service of tortillas made with corn of unknown origin, driving around rural towns every morning for those farmers who have already stopped planting corn and cooking their own tortillas[133]. During weekend workshops, agricultural productivity experts ask farmers to what extent it is resource- and time-efficient to make tortillas at home. That question implies another question: to what extent it is [economically] wise to grow corn in your milpa. But the 'product' of the work in the milpa in Yavesia is clearly not just food for the market or to fulfill families'

[132] In that context, the global, and commitments to particular arrangements of the global, are imagined, as if the global was not already present in the life of Sierra Juarez farmers.
[133] The global is also, for example, sadly everyday in absence of Don Armando's son, his responsibility of caring for his granddaughters, and the opportunity I had to work on his milpa due to the scarcity of communal labor force for the milpa.

nutritional needs: it is also the community itself. In that sense, for example, what may be considered as inefficient and slow production process (although hard work), is actually a performance that brings about other important values appreciated by the community but not registered by the scales of the neoliberal markets. The gaze of the entrepreneurial expert finds in that time and community work, however, a misused commodity, fetishizasing efficiency and turning work (by thinking of it as labor) into what Polanyi (1944) would call a fictitious commodity.

An old farmer of the Sierra Juarez commenting on GMO corn mentioned to me that new chickens in town --a breed made for egg production-- have forgotten how to care for their eggs and raise their own chicks.[134] That was his vision of the world coming to the Sierra Juarez under the new regime of life brought in technologies guided by the economic rationalities of capital. That kind of wisdom shared during work among members of the community as well as the performance of work itself talks back to the expectations of technicians of entrepreneurial success. That everyday resistance of farmers against the materialization of the neoliberal world (conjured up by experts on productivity and microfinance) is joined by the work of artists I discuss in chapter four and by activists I present in chapter five.

The experts' staging of that neoliberal dream in rural communities, however, is not too different from the work of 'sound science' experts targeting journalists that I analyze in chapter two, or from the tortilla industry strategies of corporate

[134] It took me a few seconds to realize that his answer was not unrelated to my question about his perceptions on new agricultural technologies. The farmer observes the industrial process of food production: eggs and chicks raised in farms apart from the chicken hen as a simile of what is happening with communities where new agriculture technologies fragment the family and communal work of the milpa. The simile refers to the setting apart the young and the old members of the community with consequent lost of opportunities for reproducing the community itself and transmitting knowledge.

memorialization of corn/tortilla history that I discuss in chapter three. In order for Mexicans to fully accept agro-industrial technologies requires that its success is convincingly enacted. Journalists in their newspapers provide an important space for that staging of success. Their pages have the industry's desired effect of turning sound science knowledge into news of the real.

Anna Tsing tells us that the practice of "spectacular accumulation" in the finance world is the "specul[ation] on a product that might or might not exist" (p.75, 2005). That spectacle can be seen as performed not only for the purpose of attracting financial investors but also citizens that are, in a different way, also investing their futures if they engage or accept practices that normalize new regimes of food production and consumption. Chapter two analyzes the attempts of the agro-food industrial complex to influence journalists' writings on biotechnology. I discuss how journalists are affected by attending workshops on the advantages of agricultural bio-technologies. They are trained to exercise self-discipline in using science in their articles (such as in the "proper" use of scientific terms), and to take the objective stand of sound science when listening to consumers' concerns, complaints, and arguments. While they are aware of the intentions behind the biotech industry educational events, journalists' writings nevertheless become and do end up normalizing new technologies. They are also affected by the constraints of the media itself: the limited time to investigate "the other side of the story", the limits imposed by the editorial line, the format of the note of the day, the impossibility of fitting all their ideas and information in a limited number of lines or pages. The intervention of the agro-food industry complex in the realm of news production about agricultural and

food technologies reproduces the conditions for what Kincky calls the scientization[135] of politics in Mexico (2007). As she explains, that scientization "creates barriers for the participation [of citizens in policymaking] restricting access to political processes to experts" (2011). However, this scientization operating through the disciplining of journalists is not only a barrier but also the inflexion of epistemic violence since the subaltern is "never truly expressing herself but always already interpreted" (Briggs & Sharp 2004, p.664) and scientific language becomes the only means to give credibility to subaltern knowledge (Pretty 1994, Hayden 2003). In this sense, the question is not if the subaltern can speak or is listened to, but how she would be listened to (and represented in the news) through the filters of "sound science" in journalists' interviews.

In chapter three, I demonstrate that the transition to the new food regime, exemplified by the flourization of corn tortillas is conducted not only through the use of persuasive performances, it is also enforced through strict state legislation --that regulates some producers while deregulating others-- and the use of force. The agro- industrial complex stages what I call corporate memorialization, a business driven effort to influence the collective memory though performances that recall a history of corn. In that corporate crafted history, the role of indigenous technologies and the resistance to change in the food regime are forgotten while the industry's technology is positioned as the culmination of Mexican tradition and modernity[136]. At the same time, nationalist pride is connected to a corporate entrepreneurial success in the food industry (in the name of the nation) measured by its global reach.

---

[135] Kinchy calls scientism "the belief that policy and regulatory decisions are best dictated by scientific reasoning, since science is presumed to transcend human values and interests to provide answers upon which all can agree" (2007) Scientization is the process that make scientism possible.

[136] This however is not a rejection of the past.

However, as I discuss in chapter four, resistance to the spectacular accumulation that invoke citizens' commitments to a new economic and social order is also done through spectacle. For graphic artists in Mexico, drawing becomes a weapon to destabilize the attempts of normalizing the neoliberal food regime. Cartoonists directly target corporate and state public relations campaigns that champion food and agriculture policies and practices. Their art unpacks the contradictions between the spectacles of neoliberal success and the crises in the countryside. While sharing newspaper pages and the constraints of the editorial lines with journalists, cartoonists have the freedom of not depending on access to their sources [i.e. for interviews] and they have the power of humor on their side. But graphic artists have also used the image of corn itself as a weapon bringing together ideas of resistance and the pre-Hispanic past as a call for action among Mexicans. Those images are circulated appropriated and re-appropriated, sometimes as a commodified icon of resistance. However, as cartoonists observe,[137] activists have used their drawings and even brought to life their characters in demonstrations around the country.

In the struggles against the transformation of the Mexican food regime, two main activist coalitions working in the defense of food sovereignty share common goals but find their different approaches to be a significant reason to keep themselves apart from each other. Chapter five analyzes the reasons of the divide between the Without Corn there is no Country campaign (SMNP) and the Network in Defense of Corn (RDM), recognized (by activists of the SMNP campaign) as a weakness that permits the advance of the agro-industrial food complex in Mexico. While both are concerned about the

[137] And other graphic artists also make their work available for activists.

Mexican loss of food sovereignty and the introduction of GMO corn in the countryside, they are separated by their different moral reasoning regarding the clientelist behavior of leaders and groups associated with the SMNP and the RDM's unsubstantiated claims of connections between malformed corn and GMO contamination. Even though unproved scientifically, the RDM uses those claims as a performed nightmare, a spectacle of monstrous failure of corn biotechnology that not only helps them to make visible "contamination" but also serves the purpose of counteracting the dreams of agricultural success. This is a direct defiance to the state and experts' monopoly of the means of transgenes intelligibility. The urgency expressed as a justification for that strategy is not that different from the urgency of agro-industrial financial investors' leap of faith on GMOs, pointed out by Tsing (1995) [138].

My work brings together the literature on globalization of food and agriculture and scholarship on postcolonial natures in order to analyze the ways in which the neoliberalization of Mexican food regime is normalized in five disparate arenas.
In my study I consider neoliberalism not as an ideology or a set of policies but as a project (McMichael 2000) coming to life through everyday practices. In contrast to the former scholarship, I see the globalization of food and agriculture as a process that actually needs to be stabilized through performances to make it acceptable both materially and culturally. Interventions to transform, for example, consumer preference in tortillas' taste and texture, are also attempts to stabilize specific constellations of global interconnections. My study exposes a two fold process in the operation of neoliberalism. On the one hand, subjects are discouraged from continuing their productive practices

[138] Tsing points out this faith in biotechnology as part of investors' spectacular accumulation (2005, p.75)

(such in the case of peasants compelled to abandon corn cultivation and encouraged to adopt more marketable products), on the other their food/knowledge is *recuperated* in the form of luxury consumption. The scholarship on the globalization of food and agriculture does not discuss this process as forms of consumption[139] that can be lost.

In my research I also highlight the scientization of the GMO corn controversy not only as a form of excluding indigenous and small scale farmers from participating in policymaking regarding food and agriculture (Kinchy 2007), but also as a form of inflicting epistemic violence on them. They are forced to express their claims with the language of "sound science". The complex relationship between market science and indigenous knowledge (as Hayden explains) "produc[es], invok[es], and giv[es] shape to subjects, objects, and interests" (2003, p.6).

While the arenas of struggles I examine in this research might appear disconnected they are all articulated within the neoliberal master narrative. My attention to the role of knowledge and power in the naturalization of social and economic transformations in Mexico also contributes to STS discussions regarding the interplay of science and capital in the development and expansion of agro-food technologies. These technologies are not just those that materially improve production but also, as I argue, technologies of the self (relying both on biopower and sovereign power) to turn individuals into consumer citizens. Besides situating the economic rationality and the market as the realms of thought and action where peoples' and institutions' prestige is attainable, the master narrative of neoliberalism, as Peters and Besley explain with respect to other contexts, "has successfully extended the principle of self-interest into the

[139] Symbolic and material consumption practices, that constitute (and are constituted by) particular social, economic, and cultural arrangements.

status of a paradigm for understanding politics itself and, in fact, not merely market but all behavior and human action" (2006, p.32). In that sense, the transformation of the food regime is part of a broader change in the social order that, in the case of food, attempts to stabilize itself by changing the forms of listening to and writing about food and agro-technologies, new techniques of cultivating and eating, as well as new ways of remembering the history of corn in Mexico.

METHODS APPENDIX

This is a multi-sited ethnography and multi-methods qualitative study in which I examine the stabilization of the neoliberal food regime and the struggles against the loss of food sovereignty including the introduction of GMO corn in Mexico. In this study, I consider globalization to be a strategy and an imagined project brought into life through the articulation of disparate forces at different scales. I conduct archival research, in-depth interviews and participant observations in Mexico City, Oaxaca City, and the communities of Yavesia and Capulalpam in the Sierra Juarez of Oaxaca. I also use discourse analysis of the data collected and content analysis of visual images. I obtained a formal clearance of the Institutional Review Board for the protection of Human Subjects to conduct my dissertation fieldwork in Mexico City and Oaxaca.

1. Archival research

I conducted archival research during my dissertation fieldwork between 2007 and 2008. I collected not only Mexican scholarly work analyzing the crisis in the Mexican countryside but also other documents that provided me with different representations of Mexican agriculture and food production, in particular regarding corn production and consumption. The libraries of the Universidad Nacional Autónoma de Mexico (UNAM), Universidad Autónoma Metropolitana (UAM), Universidad Autónoma Benito Juarez de Oaxaca (UABJO), Universidad Nacional de la Sierra Juarez (UABJO), the Institute of Graphic Arts of Oaxaca (IAGO), the Welte Institute for Oaxacan Studies, The Centro de Investigaciones y Estudios Superiores Antropológicos y Sociales (CIESAS-Oaxaca) were

frequent locations where I collected documents for my research. I also collected documents, such as flyers, pamphlets, videos, recorded music and other material offered in the streets of Mexico City and Oaxaca during public events and demonstrations. Moreover, two journalists provided me with flyers, paper copies of power point presentations, and portfolios with documents provided to them in biotech workshops.

3. Interviews

I conducted a total of 80 interviews for this study, in which I examined the resistance to the introduction of GMO corn in Mexico and the scenarios in which the neoliberal food regime was unfolding in that country. I collected information about the work of activists, farmers and journalists involved in the reproduction of knowledge regarding agricultural policies and technologies. I audio-recorded those interviews and took notes during them. Also I audio-recorded my own thoughts immediately after my interviews. I started transcribing my interviews during my fieldwork. Those preliminary transcriptions provided me with valuable information to improve my next interviews. However, I completed my transcriptions after coming back from my fieldwork. It took me five months to complete my transcriptions. My transcriptions (as in my fieldnotes) also incorporated information of the surroundings such as sounds, the position of the objects and the interviewees i.e. in the table or the patio. I only translated my transcripts to English whenever I needed to cite my interviewees in the text of my dissertation.
I interviewed five journalists with long-time experience writing about environmental and agriculture news in newspapers with nationwide circulation. I applied the snowball sample method to select my interviewees among those environmental journalists who not only have attended biotechnology educational workshops but also specialized in writing

the "note of the day." I preferred these journalists instead of other more visible characters in Mexican media involved in anti-GMO campaigns (who write editorial articles) because their writings are represented as objective information that communicate *the facts* constituting everyday news. The first journalist I interviewed was suggested by a rural sociology professor at UAM and the next journalists were suggested by her and other journalists I interviewed. These were some of the smoothest interviews, with anecdotes and information the journalists were eager to share but limited to write about in their newspapers due to their rules of professional practice. I interviewed four of these journalists twice. These interviews were open-ended, unstructured and the duration of the interview was limited to the journalist availability. Most of them lasted between an hour and two hours. Only one journalist limited the interview to 30 minutes. Interviewees usually selected cafes or restaurants as the settings for the interview. The most frequent restaurants selected were Sanborns, a popular chain restaurant owned by Carlos Slim.

I interviewed 48 farmers. Interviewees were selected following the snowball sample technique. Most of them were interviewed in their homes or in their milpas. In their homes, I interviewed the women and men together when they were interested in participating together in the interview. These interviews were usually in their front patio or while having a snack or eating at their dinner table. However, in some cases I came back afterwards to interview the women of the household separately when men appeared to lead the conversation favoring their viewpoints instead of the women's voice. My interviews were unstructured and open-ended. In the milpas, I conducted the interviews during breaks. The duration ranged from 20 minutes to two hours.

Also in the countryside, I interviewed agricultural technicians working for state offices or NGOs that offered workshops to farmers with training on farming technologies and entrepreneurial skills as well as micro-finance. I conducted those interviews in open spaces near the municipal building where their workshops took place.

I also interviewed members of NGOs supporting activists and campaigns against the introduction of GMO corn in Mexico. I conducted most of these interviews in the interviewees' offices. Only one of these interviews had place at a café in Mexico City and another at a restaurant in Oaxaca city. These were open-ended unstructured interviews in which I asked them questions regarding their views on the struggles against transgenetic corn, their perceptions of the state strategies in the introduction of biotechnology in Mexican agriculture, their participation in campaigns of resistance and their articulation with other organizations including grassroots movements and their organizations' work in the countryside. My interviews with professors (some of them actively involved in the resistance against GMO corn) provided me with information regarding current Mexican scholarship that examined the crisis in the countryside, peasants' responses and discussions about potential impacts of transgenes in their agriculture. They suggested publications and provided me with contact information to advance my research. In one case, a professor at the UNAM didn't want to receive me because I was coming from a university of the United States. In that situation, such as in others, I stressed my identity as a Peruvian student. People in Yavesia for example used to call me *"el peruano"* the Peruvian.

4. **Participant observation**

In the countryside, I conducted participant observations in activities such as planting corn and weeding in family owned *milpas*. I also participated in obligatory communal work in the role of *topil*, the lowest ranked communal service work and in *tequio* work in Capulalpam and Yavesia. Moreover, I let people in both communities know that I was available to participate in other communal activities such as, for example the emergency replacement of pipes sections (damaged by land slides) that provided water from the mountains springs to the Yavesia community. My involvement in communal work was not only important for me to collect information regarding perceptions as well as practices through which neoliberal forces are contested or negotiated by community members but also it was key to gaining a good rapport and better access to the communities .

A normal day participating as a *topil* involved work from 8am to 5pm with a main lunch break from 12pm to 1pm. The work however included small pauses for various reasons such as time for a snack, waiting for the arrival of tools, construction material or simply a short break after continuous exhausting physical work. Since most of this work was conducted in open spaces, the work was also limited if we had rain. I participated in the same activities that my fellow *topiles* worked on such as transporting construction material, sand and bags of cement, mixing the construction material, tearing down a wall with club hammers, removing stones from water channels and cleaning the river shores. In Capulalpam I also participated in cleaning the town water reservoir and daily trash collection. I usually brought with me a small notebook and my voice recorder but I avoided taking notes in front of the community members since I perceived that would

interrupt the flow of our interactions. In some cases, when ideas came to my mind and I was afraid to forget them I walked a little farther and voice recorded myself. I usually took notes or recorded my ideas during the lunch break while walking (five minutes) back home where my hosts prepared lunch for me everyday[140]. During lunch I also used to share and ask questions about my experience from work with my hosts. I also took notes of their comments afterwards. At the end of the day I usually transferred my notes to a word document in my computer in which I also kept a diary of my impressions from the day.

I also continued my participant observation at public spaces where people hang out at the end of the day and at my hosts' homes while helping on household chores or watching TV. My host families were recommended to me by a community member I contacted before my arrival. In Yavesia and Capulalpam I paid for a room in family houses and my daily meals were cooked by my host families. After two months with my first host family, I changed my host family since I was looking for a family more involved in milpa work. In the time in between switching hosts, I traveled to Mexico City and Oaxaca City to conduct interviews. My first hosts in Yavesia was a couple in their fifties living with their youngest daughter, a teenager finishing high school in a school located in a different town. They have another daughter married and living also in Yavesia. They all, including their son in law, were part of the everyday life in this household. By that time their main income came from the work of the family head on activities related to the community attempts to control a plague affecting its forest. The

[140] That was not the case if I worked in the milpas since under the tradition of the guelaguetza or in case labor was hired to work in the cornfields, the owner of the milpa has to provide lunch to their workers.

extraction of timber from infected trees became a temporary source of income for some members of the community. My second host family in Yavesia was composed by a couple in their eighties, a daughter in her thirties, their daughter in law and two grandkids. They had sons and daughters living outside of Yavesia, including a son in the United States as a temporal worker. Their son and daughter in law were living in a different house a few feet away from my host's house but shared a common patio and visited the elder couple everyday. Despite their age, my hosts still worked in their milpa, collected apples from trees in their plots for local markets and [the women in the house] cooked daily meals mostly with products from their milpa. My hosts in Capulalpam were a couple in their late fifties with two sons. One of them was at home most of the time, sometimes supporting his father in his work as a plumber, and the oldest brother lived in Oaxaca city studying at that city's vet school. This was one of the few families growing corn in Capulalpam, however, their main source of income was renting rooms to visitors coming to town.

In Capulalpam I was not allowed to attend periodic communal decision-making meetings as I was in Yavesia. These are meetings where the community discusses its problems and organizes its activities for the future. However, I attended local celebrations in both communities and training workshops in Yavesia.

In Mexico City my participant observation included attending gatherings organized by activists, such as meetings in preparation for the "mega march" of January 31st 2008, demonstrations, activists' celebrations, and forums. In those events I took notes when possible and took photographs.

In Mexico City and Oaxaca city I also stayed at family residences most of the time instead of staying in accommodations planned for the hospitality industry. In Mexico City I also rented a room in an apartment shared with a student from the UNAM and later stayed at the homes of another student and of a young couple that hosted me when I had to come back to Mexico City to attend events (such as conferences, workshops or demonstrations) and conduct interviews. Staying at their places gave me an insider view of Mexican history and politics. My opportunity to have conversations with them about different topics and their orientations was also important for helping me to understand and navigate their city. I also stayed at a family home in Oaxaca City whenever I had to go there to conduct interviews and visit local libraries. A friend put me in contact with my host family in Mexico City but also I was able to contact other hosts in Mexico City and Oaxaca City via couchsurfing, an internet platform designed to connect travelers with potential hosts at travel destinations.

5. Data analysis

I applied content analysis and James Paul Gee's approach (2002) to discourse analysis in my analysis of the transcripts of my interviews and data from my field notes. Gee's approach to discourse analysis is appropriate for my research because it provides tools of inquiry to understand meanings as "grounded in actual practices and experiences" (situated meanings) (2002, p.40), as the product of and producing simplified representations of the world (cultural model), and as embedded with the history of their formations and changes in practice (intertextuality). I pay attention to these three threaded dimensions in my analysis.

Particularly relevant for my work, Gee's approach uses a concept of Discourse (with a big "D") that "involves a great deal more than "just language""(2002 p.17) since it also entails (while focusing on language) its interactions and connections to practices and objects, (as well as 'ways of thinking, acting, interacting, valuing feeling, believing' (2002 p.13)) in the production and stabilization of social formations. I use inquires from this approach to unpack socially situated activities that have a role in the naturalization of agricultural technologies and technologies of self-improvement. In my analysis of visual images I also apply content analysis and discourse analysis. By tracing the intertextuality of cartoons that appropriate state and corporate representations of agricultural success I present graphic artists' attempts to expose the contradictions of master narratives and thus to put into question the effectiveness of neoliberal policies. I conducted this analysis of my data by hand.

As a researcher, my decisions of not only the places and the situations where I conducted my participant observations but also the subjects I interviewed were influenced by my interest in knowing peoples' involvement in the reproduction or resistance to the impact of neoliberalism in corn agriculture. For example my decision about the people I decided to interact with in the communities where I conducted my fieldwork, or in my host families in Yavesia and Capulalpam was motivated by my focus on being exposed to the community life in their milpas. That meant that I distanced myself from other activities such as forestry, which also has an economic impact in the communities I worked with. However, I always had to adjust my data collection to the opportunities of getting involved in community activities and for that reason I ended up spending more time in activities other than corn cultivation. While in those activities I

interacted with community members that also worked in milpas, I invested more days of participant observation on maintenance of the community infrastructure than working in the cornfield itself. The same *natural* conditions (such as its seasonality or weather dependence) that prevent agriculture from being fully industrialized also prevented me as an ethnographer from using my labor force every day in agricultural related activities.

Moreover, while I used the snowball sampling technique to select my interviewees, I ultimately shaped my sample since I had to discard some potential interviewees in order to avoid the redundancy of information from similar perspectives or to focus on those with experience more relevant to my research. For example, in selecting the journalists I interviewed, I narrowed the pool of journalists to those who write everyday news. However, I interviewed journalists with different approaches regarding the role of biotechnology companies in the education of journalists. I selected them after I had reviewed their writings, the editorials of the newspapers they worked in, and information provided by other journalists. In other cases, such as my interviews of agricultural technicians, I limited my pool to those available in the communities I was conducting my participant observation. While I could have obtained more data regarding the state programs for agricultural development if I had selected those interviewees from a broader range of institutions and experts, my focus on practices compelled me to focus on those who were actually involved in the lives of farmers I was working with.

Bibliography

Ahumada, M. (2007) *Jijos del Maiz*. *La Jornada*. January 19.

Alarcon, J. (2008) Maíz transgénico. *Moneros*. Retrieved from: http://moneros.uni.cc/?tag=maiz-transgenico. Last accessed on August 5 2011.

Alcalde, A., et al. (2000) *Trabajo y Trabajadores en el Mexico Contemporaneo*. Mexico DF: Miguel Angel Porrua.

AGROBIO (2008) *Objetivos de Agrobio Mexico*. Retrieved from: http://www.agrobiomexico.org.mx/agrobio.htm. Last accessed on December 12, 2008.

Arroyo, A. et. al. (2002) *Resultados del Trabajo de Libre Comercio de America del Norte en Mexico: Lecciones para la Negociación del Acuerdo de Libre Comercio de las Americas*. Mexico DF: Red Mexicana de Accion Frente al Libre Comercio.

Anderson, W. (2003) "The Natures of Culture: Environment and Race in the Colonial Tropics". In: *Nature in the Global South: Environmental Projects in South and South Asia*. Duke University Press.

Audelo, J. (2004) "¿Qué es el Clientelismo? Algunas Claves para Comprender la Política en los Paises en Vias de Consolidación Democratica." *Estudios Sociales*, 12(24), 124-142.

Baker, P. (1990) "The Domestication of Politics: Women and American Political Society, 1780-1920. In: *Women, The State and Welfare.* L. Gordon Ed. University of Wisconsin.

Barajas, R. Aka "El Fisgón" (2008). El Maíz y El país. *La Jornada*. January 03.

Barkin, D. (2001) "La Nueva Ruralidad y la Globalización." In: *La Nueva Ruralidad en America Latina*. E. Perez and M. Farah (Eds.) Vol. 11, Bogota: Pontificia Universidad Javeriana.

Barkin, D. (2002) "The Reconstruction of a Modern Mexican Peasantry." *Journal of Peasant Studies*, 30(1), 73 – 90.

Barragan, D. (2009.) Corn Grenade Renegade. In: *Olmeca*. La Contra Cultura. Record Label: IXIM / Dos Manos [Audio CD]

Barros, C. & M. Buenrostro (2005) Nixtamal y tortilla. *La Jornada*, August 9.

Bartra, A. (2001) "La Revolución de Victor Toledo." *Cuadernos Agrarios*, 21. Nueva Epoca, Mexico.

Baviskar, A. (2003) "Tribal Politics and Discourses of Indian Environmentalism." *Nature in the Global South. Environmental Projects in South and Southeast Asia*. Duke University Press.

Bello, W. (2008) "Manufacturing a Global Food Crisis." *Global Asia* 30(2), pp.15-25.

Belletti, G. and A. Marescotti (1997) "The Reorganization of Trade Channels of a Typical Product: The Tuscan Extra-Virgin Olive Oil." Paper presented at 52nd EAAE Seminar "Typical and Traditional Products: Rural Effects and Agro-Industrial Problems". Parma 19-21, June.

Benson, A. (2006) "Consumers' Acceptance of Agricultural Biotechnology and Risk Communication Approaches". Presentation presented at the US Grain Educational Tour.

Bourdieu, P. (1979) *Outline of a Theory of Practice*. Cambridge University Press.

Bowker, G. (2005) Time, Money, and Biodiversity. In: *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Blackwell Publishing.

Boyd, W., W. Prudham, and R. Schurman (2001) "Industrial Dynamics and the Problem of Nature." *Society and Natural Resources*. 14(7), pp. 555-570.

Braun B. and J. Wainwright (2001) Nature, Poststructuralism, and Politics. In: *Social Nature. Theory, Practice and Politics*. Blackwell Publishers.

Braun, B. (2003) On the Raggedy Edge of Risk. Articulations of Race and Nature after Biology. In: *Race, Nature, and the Politics of Difference*.

Braun B. (1997) "Buried Epistemologies: The politics of Nature in (Post) Colonial British Columbia." *Annals of the Association of American Geographers*. 87, p. 3-31.

Braun, B. (2000) "Producing Vertical Territory: Geology and Governmentality in Late Victorian Canada." *Ecumene* 7, pp. 7-46.

Brigg, M. (2002) "Post-development, Foucault and the Colonisation metaphor." *Third World Quaterly*. 23(3), pp. 421-436.

Brittenham (2006) "The Politics of Public Painting at Cacaxtla, Mexico, A.D. 600-900." Paper prepared for: The Politics of Public Art, 17th Annual Graduate Symposium, University of California, Berkeley.

Brown, W. 2003. "Neo-liberalism and the End of Liberal Democracy." *Theory and Event* 7:1.

Browne, S. (1995) "Reading Rhetoric, and the Texture of Public Memory." *Quarterly Journal of Speech*. 81(2), pp. 237-265.

Bryant, R. (2005) *Nongovernmental Organizations in Environmental Struggles. Politics and the Making of Moral Capital in the Philippines*. Yale University Press.

Bunin, L. J. (2001) *Organic cotton: the fabric of change (India, California)*. Santa Cruz, CA: University of Santa Cruz.

Caldeira, T. and J. Holston (2005) "State and Urban Space in Brazil: From Modernist Planning to Democratic Interventions." In: *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Blackwell Publishing.

Calhoun, C. (2005) "Constitutional Patriotism and the Public Sphere: Interests, Identity, and Solidarity in the Integration of Europe." *International Journal of Politics, Culture and Society*. 18(3-4), pp.257-280.

Campell, B. (2009) *Viva la historieta: Mexican Comics, NAFTA, and the Politics of Globalization*. University Press of Mississippi.

Casasús, M. (2011). Antonio Helguera: "Con la Caricatura Política logramos abrir los Márgenes de la Libertad de Expression." *El Clarín*. February 6.

Castree, N. (2001) Marxism, Capitalism, and the Production of Nature. In: *Social Nature. Theory, Practice and Politics*. Blackwell Publishers.

CECCAM (2003) *Mexico: La Contaminacion Transgenica del Maiz Nativo en el Centro de Origen*. Mexico D.F.

CENAMI (2006) Talleres de Verano 2006. Brochure published by the Comision Episcopal de Pastoral Indigena and Centro Nacional de Misiones Indigenas. Mexico D.F.

Clarke, J. (1993) Style. In*: Resistance Through Rituals: Youth Subcultures in Post-War Britain*. Routledge.

Clarke, J. (2004) "Dissolving the Public Realm? The Logics and Limits of Neo-liberalism." *Journal of Social Policy*. 33(1), pp. 27-48.

Clapp, J. (2006) "Unplanned Exposure to Genetically Modified Organisms: Divergent Responses in the Global South." *The Journal of Environment and Development*. 15(1), pp. 3-21.

CNN Expansion (2012) Mexico Anuncia Alianza Agricola en Davos. Retrieved from: http://www.cnnexpansion.com/economia/2012/01/27/mexico-anuncia-alianza-agricola-en-davos. Last accessed on March 2, 2012.

COFUPRO (2012) Fundaciones Produce. Retrieved from: http://www.cofupro.org.mx/cofupro/cofupro.php?documentweb=2&idseccion=1 Last accessed on August 28, 2012.

Cohen, M. (2007) ""Cartooning Capitalism": Radical Cartooning and the Making of American Popular Radicalism in the Early Twentieth Century." *International Review of Social History*. 52 (S15), pp. 35-58.

Collier, S. and A. Ong (2005) Global Assemblages, Anthropological Problems. In: *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Blackwell Publishing.

Collier, S. (2005) Budgets and Biopolitics. In: *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Blackwell Publishing.

CONACULTA (2011) "Moneros Elogian Calidad de José Clemente Orozco y critican su falta de solidez ideológica como caricaturista." Retrieved from: http://www.conaculta.gob.mx/sala_prensa_detalle.php?id=10714. Last accessed on March 14, 2011.

Concheiro, L. and Diego, R. (2007) Entre la Utopía y la Alienación: Los Símbolos del Difícil Camino del Movimiento Social El Campo no Aguanta Más. In: *El Campo no Aguanta Mas*. Ed. Armando Sanchez Albarran. Universidad Autonoma Metropolitana.

Contreras, A. (2008) Pueblo Unido, Mexico en Lucha. Retrieved from: http://www.flickr.com/photos/ponchosqueal/3033585015/in/photostream. Last accessed on May 15, 2011.

Cook, I. (1994) New Fruits and Vanity: Symbolic Production in the Global Food Economy. In: *From Columbus to ConAgra: The Globalization of Agriculture and Food*. University Press of Kansas.

Cooper, F. and A. Stoler (1997) Between Metropole and Colony: Rethinking a Research Agenda. In: *Tensions of Empire: Colonial Cultures in a Burgeois World*. University of California Press.

Cortez, L. and Diaz, J. (2005) "La Seguridad Alimentaria y la Producción de Maíz en un Entorno de Mercado y Políticas del Estado. Un Estudio de Caso." *Estudios Agrarios* 11(29). Nueva Época.

Cruz, A. (2005). "Fallo en Contra de la Comida Mexicana." *La Jornada*, November 26.

De Ita, A. and S. Ruta (2000) ¿Cuánta Liberalización Aguanta la Agricultura? Impacto del TLCAN en el Sector Agroalimentario. Presentation to Chamber of Deputies, LXII Legislature, Comisión de Agricultura, Mexico.

De Ita, A. (2008) "Fourteen Years of NAFTA and the Tortilla Crisis." Americas Program Special Report, Center for International Policy. Retrieved from: http://americas.irc-online.org/am/4879. Last accessed on June 20, 2010.

Del Angel, K. (2006) Development of Second Generation Transgenes. Canal once. Transcripts retrieved from: http://oncetv-ipn.net/noticias/index.php?modulo=despliegue&dt_fecha=2006-04-17&numnota=76. Last accessed on August 14, 2009.

DeLuca, M., & Peeples, J. (2002) "From Public Sphere to Public Screen: Democracy, Activism, and the "Violence" of Seattle." *Critical Studies in Media Communication,* 19(2), pp. 125-151.

DiPalma, A. (1996) "How a Tortilla Empire Was Built on Favoritism." *New York Times.* February, 1996.

Dodson, G. (2010) "Professional Discourse and the Legitimation of the 2003 Iraq Invasion." *Journalism Studies*. 11(1), pp. 9-114.

Donath de la Pena, L. (2000) "La Cultura del Maíz. Entre la Tecnología y la Desinformación." *de Vinci*. 2(3), pp. 41-49.

Dunn, E. (2004) *Privatizing Poland: Baby Food, Big Business, and the Remaking of Labor* (Culture and Society After Socialism). Cornell University Press.

DuPuis M. (2000) "Not in my Body: rBGH and the Rise of Organic Milk." *Agriculture and Human Values*. 17, pp. 285-295.

Duss, P. (2001) "Presidential Address: Weapons of the Weak, Weapons of the Strong – The Development of the Japanese Political Cartoon." *The Journal of Asian Studies* 60 (4), pp. 965-997.

El Chamuco (2008) "2008 "Este Año nos va a ir Bomba."" January. 140.

El Norte (2006) "Amaga APPO con Huelga de Consumo" September 28.

Enciso, A. (2008) "Transgénicos Presentes en Maíz de Oaxaca, Confirman Científicos." *La Jornada*. November 17.

Escobar, A. (1995) *Encountering Development. The Making and Unmaking of the Third World*. Princeton University Press.

Espinosa, G. (1995) “La guerra de la tortilla." *Cuadernos Agrarios*, 11-12, pp. 67-78. Nueva Epoca.

Esteva, G. and C. Marielle (2003) Sin Maíz no hay País. Mexico DF: CONACULTA.

Esteva, G. (2007) “The Asamblea Popular de los Pueblos de Oaxaca: A Chronicle of Radical Democracy.” *Latin American Perspectives* 34(1), pp.129-144.

Fragua, A. (2008) “La Tortilla debe ser Considerada Patrimonio Nacional y Mundial asegura Icomos Puebla.” *La Jornada de Oriente*. October 14.

Fraser, N. 2003. “From Discipline to Flexibilization?—Reading Foucault in the Shadow of Globalization.” *Constellations.* 10(2), pp. 160-171.

Fitting, E. (2006) Importing Corn, Exporting Labor: The Neoliberal Corn Regime, GMOs, and the Erosion of Mexican Biodiversity. *Agriculture and Human Values*. Vol.23 (1), pp.15-26.

Fitting, E. (2011) *The Struggle for Maize. Campesinos, Workers, and Transgenic Corn in the Mexican Countryside*. Duke University Press.

Foster, J. (2002). *Ecology Against Capitalism*. NY: Monthly Review Press.

Foweraker, J. 1990 “Popular movements and political change in Mexico.” In: Joe Foweraker and Ann L. Craig (eds.), *Popular Movements and Political Change in Mexico*. London and Boulder: Lynne Rienner.

Fraser N. (2003) From discipline to flexibilization? Rereading Foucault in the shadow of globalization. In: *Constellations* 10, pp.160–71.

Fundación Comunitaria Oaxaca (2012) Fundación Comunitaria Oaxaca A.C., Retrieved from: http://www.fundacion-oaxaca.org/_modules/_nosotros/index.php Last accessed on August 28 2011.

Funes Monzote, F. (2010) Funes Monzote Interviewed by Groggs in: “Cuba’s Transgenic Corn Debate Heats Up.” *Havana Times*. October 6. Retrieved from: http://www.havanatimes.org/?p=30603. Last accessed on March 18, 2011

Gamson, W. and D. Stuart (1992) Media Discourse as a Symbolic Contest: The Bomb in Political Cartoons. Sociological Forum. 7(1), pp. 55-86.

García, H., and A. Keleman (2007) *La Crisis de la Tortilla del 2007: Coyuntura of Falla Estructural?* Mexico City, Oxfam International.

GEA (2007) ‘Fwd: Aniversario GEA’. Email forwarded by Adela San Vicente. November, 29.

Gee, J.P. (2002) *An Introduction to Discourse Analysis. Theory and Method*. Routledge. London.

Greenberg, J. (2002) "Framing and Temporality in Political Cartoons: A Critical Analysis of Visual News Discourse." *The Canadian Review of Sociology and Anthropology*. 39(2), pp.181-198.

Greenpeace (2002) Seed of Trouble, A Cartoon/Graphic Art Competition. Retrieved from: http://activism.greenpeace.org/cybercentre/gpi/Genetic_Engineering/1030722664/1030722664.html. Last accessed on May 21, 2010.

Gille, Z. (2010) "Is there a Global Post Socialist Condition?" *Global Society*, 24(1), pp.9-30.

Gille, Z. (2006) "The Tale of the Toxic Paprika: Theorizing Euro-Globalization." Unit for Criticism, UIUC. Keynote. February 20.

Goldman, M. (1996) *Privatizing Nature: Political Struggles for the Global Commons*. London: Pluto Press.

Goldman, M. (2005). *Imperial Nature. The World Bank and Struggles for Social Justice in the Age of Globalization*. Yale University Press.

Goodman D. and M. Redclift (1991) *Refashoning Nature: Food, Ecology, and Culture*. London: Routledge.

Goodman, D. and M. Watts (1997) *Globalizing Food: Agrarian Questions and Global Restructuring*. Routledge.

Goodman, D., B. Sorj, and J. Wilkinson (1987) *From Farming to Biotechnology*. London: Basil Blackwell.

Goodman, D. and M. DuPuis (2002) "Knowing Food and Growing Food: Beyond the Production-Consumption Debate in the Sociology of Agriculture." *Sociologia Ruralis*. 42(1), pp. 5-21.

Gregory D. (2001) "(Post)Colonialism and The Production of Nature." *Social Nature. Theory, Practice and Politics*. Blackwell Publishers.

Grewal, I. and C. Kaplan (1994) "Introduction: Transnational Feminist Practices and Questions of Postmodernity." In: *Scattered Hegemonies: Postmodernity and Transnational Feminist Practices.* Minneapolis: Minnesota Press. pp. 1-33.

Grove, R. (1995) Green Imperialism: Colonial Expansion: Tropical Island Edens, and the origins of environmentalism, 1600-1860. Cambridge University Press.

Gruma (2009) Everything Started with Corn, Corn History. Retrieved from: http://www.aztecamilling.com/azteca/AboutUs.aspx?ID=24. Last accessed on July 8, 2010.

Gruma (2010) "La Leyenda de Quetzalcoatl. El Dios Que Nos Dio El Maíz" [video].

Gupta A. and J. Ferguson (2002). "Spatializing States: Toward an Ethnography of Neoliberal Governmentality." *American Ethnologist* 29(4), pp. 981-1002.

Guthman, J. (2004) Agrarian Dreams: The Paradox of Organic Farming in California. University of California Press.

Hall, S. (1977) Culture, the Media and the "Ideological Effect." In: Mass Communication and Society. J. Curran et al. editors. Pp. 315-348.

Hall, S. (1991a) The Local and the Global: Globalization and Ethnicity. In: Anthony D. King (ed.).*Culture, Globalization and the World System: Contemporary Conditions for the Representation of Identity.* Binghamton: SUNY at Binghamton. Pp.19-40.

Hall, S. (1991b) Old and New Identities, Old and New Ethnicities. In: *Culture, Globalization and the World System: Contemporary Conditions for the Representation of Identity.* Pp. 41-68.

Haraway D. (1989) Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City. 1908-36. In: *Primate Visions*. Verso.

Haraway, D. (1991) "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." In: *Simians, Cyborgs, and Women: The Reinvention of Nature.* New York: Routledge.183-202.

Haraway D. (1989) Biopolitics of a multicultural field. In: *Primate Visions*. Verso.

Haraway, D. (2000) A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Centrury. In: *Posthumanism: Readers in Cultural Criticism*. Palgrave.

Haraway, D. (2003) The Companion Species Manifesto. Dogs, People, and Significant Otherness. Prickly Paradigm Press.

Harriman, R. and J. Lucaites (2003) Public Identity and Collective Memory in U.S. Iconic Photography: The Image of "Accidental Napalm." *Critical Studies in Media Communication*, 20(1), pp. 35-66.

Hart, G. (2001) Development Critiques in the 1990s: Culs de Sac and Promising Paths. *Progress in Human Geography,* 25 (4) pp. 649 - 658

Hart, G. (2001) Geography and Development: Development/s beyond Neoliberalism? Power, Culture, Political Economy. *Progress in Human Geography* 25(4) pp. 649 - 658

Hart, G. (2004) "Geography and development: Critical Ethnographies of d/Development in the Era of Globalization." *Progress in Human Geography* 28(1) pp. 113 – 122.

Hart, M. (2007) Humour and Social Protest: An Introduction. *Humour and Social Protest. International Review of Social History,* 52(15) Edited by M. Hart and D. Bos. Cambridge University Press.

Harvey, D. (1989) *The Condition of Postmodernity. An Inquiry into the Conditions of Cultural Change*. Oxford; Blackwell.

Harvey, D. (2003) *The New Imperialism*. Oxford University Press.

Hayden, C. (2003) *When Nature goes Public: The Making and Unmaking of Bioprospecting in Mexico*. Princenton University Press.

Hebdige, D. (1979) Subculture, The Meaning of Style. Routledge.

Helguera, A. (2007) Jijos del Maiz*. La Jornada.* January 19.

Hellman, J. (1994) "Mexican Popular Movements, Clientelism, and the Process of Democratization." *Latin American Perspectives*, 81(21) 2, pp. 124-142

Hernandez, J. (2005) "Convoca Agrobio al Concurso sobre Biotecnologia Agricola. Fundamental para la divulgación del Conocimiento." *El Día*. April 27.

Hernandez, L. (2008) Presentation at Forum "For the Life of the People of Corn. Confronting the Food Crisis and the Transgenes". July 2008.

Heffernan W. and D. Constance (1994) Transnational Corporations and the Globalization of the Food System. In: *From Columbus to ConAgra: The Globalization of Agriculture and Food.* University Press of Kansas.

Heidegger, M. (1977) The Question Concerning Technology. In: *The Question Concerning Technology and other Essays*. New York: Harper and Row.

Higgins, V. and K. Natalier (2004) Governing Environmental Harms in a Risk Society. In: *Controversies in Environmental Sociology*. Edited by Robert White. Cambridge University Press.

Howard, P. (2003). "Consolidation in Food and Agriculture: Implications for Farmers and Consumers." CCOF Magazine. Santa Cruz, CA: California Certified Organic Farmers. 20(4), pp. 2-6.

ICAPET (2012) Instituto de Capacitación y Productividad para el Trabajo del Estado de Oaxaca. Retrieved from: http://www.empleo.oaxaca.gob.mx/index.html. Last accessed on August 28.

IFIC (1998) "Improving Public Understanding, Guidelines for Communicating emerging Science on Nutrition, Food Safety, and Health." *Journal of the National Cancer Institute*, 90(3), February 4.

IFIC (2009) Home page: International Food Information Council (IFIC) supporters. Retrieved from: http://www.ific.us/LinkClick.aspx?fileticket=CLhtnoB7SoU%3d&tabid=1009. Last accessed on May 10, 2010.

Itanoni (2010) "Itanoni – Flor de Maiz." retrieved from: http://www.si-oaxaca.com/Itanoni.htm. Last accessed on October 24, 2010.

Itanoni (2010) Itanoni, Antojeria y Tortilleria. Retrieved from: http://www.itanoni.com.mx/. Last accessed on September 5, 2010,

Jenkins, R. (1992) *Key Sociologists*. Pierre Bourdieu. Routledge.

Kautsky, K. (1988) *The Agrarian Question*. London: Zwan.

Keleman, A., García, H. and J. Hellin (2009) "Maize Diversity, Poverty, and Market Access: Lessons from Mexico." *Development in Practice.* 19(2), pp. 187-199.

Kinchy, A. (2007) Genes Out of Place: Science, Activism, and the Politics of Biotechnology. Ph.D. Dissertation. University of Wisconsin-Madison.

Kloppenburg, J.R., Jr. (1988) *First the Seed: The Political Economy of Plant Biotechnology, 1492-2000*. Cambridge: Cambridge University Press.

La Jornada (2012) "Carlos *Slim liderea la nueva lista de ricos de Bloomberg."* March 6, Mexico. Retrieved from: http://www.jornada.unam.mx/2012/03/06/economia/024n1eco. Last accessed on March 19th, 2012.

Lakoff, A. (2005) The Private Life of Numbers: Pharmaceutical Marketing in Post-Welfare Argentina. In: *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Blackwell Publishing.

La Reforma (2006) “Cierra un Prometedor Negocio.” October 23.

Lawless Concept (2011) “About us.” Retrieved from: http://lawlessconcept.wordpress.com/about/ Last accessed on July 15, 2011.

Secretaria de la Función Pública (2003) “Ley Orgánica de la Administración Pública” Retrieved from: http://www.funcionpublica.gob.mx/leyes/loapf2000.htm#t1. Last accessed on October 23, 2010.

Lind D. and E. Barham (2004) “The Social Life of the Tortilla: Food, Cultural Politics, and Contested Commodification.” *Agriculture and Human Values,* 21(1), pp.47-60.

Lloyd, D. (1999) *Ireland after History*. University of Notre Dame Press.

Luke, T. (1997) *Ecocritique. Contesting The Politics of Nature, Economy, and Culture*. University of Minessota Press.

Macnaghten, P. and Urry, J. (1998) *Contested Natures*. Sage.

Magubane Z. (2003) “Simians, Savages, Skulls, and Sex” In: *Race, Nature, and the Politics of Difference.* Edited by Moore, D. et al. Duke University Press.

Massieu Y. and Lechuga, J. (2002) “El Maiz en Mexico: Biodiversidad y Cambios en el Consumo.” *Análisis Económico,* XVII(36), pp.281-303.

Malkin, E. (1998) “Who’ll Flatten Whom in the Tortilla Wars? Corn subsidies are ending. Now it's a free-market free-for-all.” (International edition) *Businessweek*. November 16.

Maya, A. (2009) Maiz Criollo, Arma para Combatir el Transgenico. *Despertar Newspaper*. Oaxaca. October 20.

McAfee, K. (2003) “Corn Culture and Dangerous DNA: Real and Imagined Consequences of Maize Transgene Flow in Oaxaca.” *Journal of Latin American Geography*, 2(1) pp. 18-42.

McCarthy, C., et al. (2003) *Foucault, Cultural Studies, and Governmentality*. State University of New York Press.

McMichael, P. (1992) “Tensions between National and International Control of the Third World Order: Contours of a New Food Regime.” *Sociological Perspectives* 35(2), pp. 343- 365.

McMichael, P. (2000) The Power of Food. *Agriculture and Human Values* 17, pp. 21–33.

McMichael, P. (2004) Global Development and the Corporate Food Regime. Paper presented at the *Symposium on New Directions in the Sociology of Global Development. XI World Congress of Rural Sociology*. Trondheim. July 2004.

McMichael, P. (2005) Global Development and Corporate Food Regime. New Directions in the Sociology of Global Development Research in Rural Sociology and Development, 11, pp. 269–303

McMichael, P. (2008) "Peasants Make Their Own History, But Not Just as They Please …" *Journal of Agrarian Change*. 8(2- 3), pp. 205–228.

Merchant, C. (1996) "Reinventing Eden: Western Culture as a Recovery Narrative." In: *Uncommon Ground: Rethinking the Human Place in Nature*. Edited by W. Cronon. Norton.

Mestries, F. (2007) El Movimiento el Campo no Aguanta Mas: Hacia un Proyecto Campesino de Desarrollo Agricola Nacional. In: *El Campo no Aguanta Ma*s. Ed. Armando Sanchez Albarran. Universidad Autonoma Metropolitana.

Moore, D., Pandian, A., Kosek, J. (2003). "Introduction. The Cultural Politics of Race and Nature: Terrains of Power and Practice". In: *Race, Nature, and the Politics of Difference.* Duke University Press.

Mintz S. (1985) *Sweetness and Power: The Place of Sugar in Modern History*. NewYork: Penguin.

Mitchell, T. (2002) *Rule of Experts: Egypt, Techno-politics, Modernity*. University of California Press.

Morgan, K., Marsden, T., and J. Murdoch (2006) *Worlds of Food. Place, Power, and Provenance in the Food Chain*. Oxford Geographical and Environmental Studies. Oxford University Press.

Morris, S. (2000) "Exploring Mexican Images of the United States." *Mexican Studies/Estudios Mexicanos*. 16(1), pp.105-136.

Murdoch J. and M. Miele (1999) "'Back to Nature': Changing 'Worlds of Production' in the Food Sector." *Sociologia Ruralis*, (39)4.

Navarrete, J., Martínez, T., and L. Cabrera (2007). "Comparative study between radioactive contamination in powder milk by Chernobyl accident (^{137}Cs) and natural radioactivity (^{40}K)". *Journal of Radioanalytical and Nuclear Chemistry*. 272(2) pp. 277-279.

Nederveen-Pieterse, J. (2000) "After Post-development." *Third World Quarterly*. 21(2), 343-373.

Neuman, W. and A. Pollack (2010) “Farmers Cope With Roundup-Resistant Weeds.” *The New York Times,* May 04.

Neumann, R. (1998) *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa.* University of California Press.

Nustad, K.G. (2001) Development: The Devil We Know? *Third World Quarterly* 22(4), 479-489

Ochoa, E. (2000) *Feeding Mexico: The Political Uses of Food since 1910*. Scholarly Resources Inc.

Olson, L., Finnegan, C. and D. Hope (2008) Remembering and Memorializing, In: *Visual Rhetoric. A Reader in Communication and American Culture.* Sage.

O’ Connor, J. (1998) *Natural Causes. Essays in Ecological Marxism*. The Guildford Press.

O'Malley, P., Weir, L. and Shearing, C. (1997) Governmentality, criticism, politics. *Economy and Society* 26, pp. 501-17.

Ong, A. (1999) *Flexible Citizenship: The Cultural Logic of Transnationality*. Durham, N.C.: Duke University Press.

Ortiz, A. et al (2010) “1978: Gruma Internacionaliza la Tortilla.” In: CNN en Expansion. Retrieved from: http://www.cnnexpansion.com/bicentenario/2010/08/27/bicentenario-historia-tortillas-gruma. Last accessed on September 5, 2010.

Otero, G. and G. Pechlaner (2010) “The Neoliberal Food Regime: Neoregulation and the New Division of Labor in North America.” *Rural Sociology*. (75) 2, pp. 179-208.

Pasternak, S. (2005) A Trial by Biopower: Foucault, Sovereignty, and the Seed. *Conference Proceedings: Genealogies of Biopolitics.* Retrieved from: www.radicalempirism.org. Last accessed on September 20, 2011.

Pedelty, M. (1995) *War Stories: The Culture of Foreign Correspondents.* Routledge.

Peluso N. and Watts M. (2001) *Violent Environments*. Cornell University Press.

Pelusso, N. (1992) *Rich Forests, Poor People. Resource Control and Resistance in Java.* University of California Press.

Peluso, N. (2003) Territorializing Local Struggles for Resource Control: A Look at the Environmental Discourses and Politics in Indonesia. In: *Nature in the Global South: Environmental Projects in South and South Asia*. Duke University Press.

Perez, M. (2007) "Calderón imita los pactos cupulares priístas, advierten Las medidas anunciadas, acciones publicitarias, dicen productores." *La Jornada.* Retrieved from: http://www.jornada.unam.mx/2007/01/19/index.php?section=politica&article=005n2pol. Last accessed on July 20, 2011.

Perez, M. (2008) "Premura en Argentina por superar a EU en producción de maíz transgénico" *La Jornada*, May 6th.

Pilcher, J. (1998) *Que Vivan los Tamales: Food and the Making of Mexican Identity*. University of New Mexico Press.

Pilcher, J. (2004) "From "Montezuma's Revenge" to "Mexican Truffles" Culinary Tourism across the *Rio Grande"* In: *Culinary Tourism*. Edited by Lucy M. Long. The University Press of Kentucky.

Pilcher, J. (2005) "Industrial Tortillas and Folkloric Pepsi: The Nutritional Consequences of Hybrid Cuisines in Mexico." In: *The Cultural Politics of Food and Eating: A Reader*. Edited by James L. Watson and Melissa Caldwell.

Pilcher, J. (2006) "Taco Bell, Maseca, and Slow Food: A Postmodern Apocalypse for Mexico's Peasant Cuisine." In: *Fast Food/Slow Food. The Cultural Economy of the Global Food System.* Edited by Richard Wilk. Blackwell publishing.

Picher, J. (2008) The Globalization of Mexican Cuisine. *History Compass* 6 (2) pp. 526-551.

Plotnicov L. and R. Scaglion (1999) *The Globalization of Food*. Prospect Heights, IL: Waveland Press.

Poole, D. and Rascón, B. (2009) "Eating to Dream: A Tortillería in Oaxaca." *NACLA, North American Congress on Latin America, Knowledge Beyond Borders*. Jun 5.

Quist, D., and I. Chapela. (2001) "Transgenic DNA introgressed into traditional maize landraces in Oaxaca, Mexico." *Nature* (414), pp. 541-543.

RDM (2008) Programa General. Forum: "Por la Vida de los Pueblos del Maíz. Frente a la Crisis Alimentaria y los Transgenicos." July.

Reyes, P. (2010) "Violence Against Journalists in Mexico: An Interview With Laura Castellanos." *NACLA, North American Congress on Latin America: Knowledge beyond Borders*. Jun 7.

Rodriguez Munguia, J. (2009) "Prensa y Poder Político en Mexico: Una Historia Incomoda." *El Cotidiano* 58, pp 43-49. Universidad Autónoma Metropolitana.

Rodriguez Munguia, J (2007) *La otra guerra secreta. Los archivos prohibidos de la prensa y el Poder*. Mexico: Random House Mondadori/Debate.

Rogers, J. (2008) *The Ma(i)ze of Globalization: Free Trade, Gender, and Resistance in Oaxaca*. Ph.D. Dissertation. University of California at Santa Barbara.

Rojas, S. (2009) Olmeca's Musik de La Contra Cultura. In: BrownPride. Retrieved from: http://www.brownpride.com/articles/article.asp?a=773. Last Accessed on November 04, 2011

Rose, N. (1996) "Governing 'advanced' liberal democracies." In: *Foucault and Political Reason: Liberalism, Neo-liberalism and Rationalities of Government* edited by Andrew Barry, Thomas Osborne and Nikolas Rose. Chicago: University of Chicago Press, pp. 37-64.

Rubio, B. (2004) "El Campo no Aguanta Mas!: A un Año de Distancia." *El Cotidiano* 19(124), pp. 33-40.

Rubio, B. (2007) "El Campo no Aguanta Más: Claroscuros de un Movimiento Campesino." In: *El Campo no Aguanta Mas*. Ed. Armando Sanchez Albarran. Universidad Autonoma Metropolitana.

Rudiño, L. (2006) "Inducen Transnacionales la Aceptación de Transgenicos." *El Financiero*. Retrieved from: http://intranet.iiec.unam.mx/node/6440?page=0%2C0%2C1, Last accessed on April 19, 2009.

Sahlins, M. (2000) "Goodbye to *Tristes Tropes*: Ethnography in the Context of Modern World History." In: *Culture in Practice: Selected Essays*. Zone Books.

Salgado A. (2008) Forum "For the Life of the People of Corn. Confronting the Food Crisis and the Transgenes." July 2008.

Sanchez, A. et al. (2008) "Introducción." In: *El Campo no Aguanta Mas*. Ed. Armando Sanchez Albarran. Universidad Autonoma Metropolitana.

Sassen, S. (1995) "The State and the Global City: Notes Towards a Conception of Place-Centered Governance." *Competition and Change* 1, pp. 31-50.

Schaeffer, R. (1993) "Standardization, GATT and the fresh food system." *International Journal of Sociology of Agriculture and Food*. 3, pp.77-81.

Schurman, R. and W. Munro (2010) *Fighting the Future of Food. Activists versus Agribusiness in the Struggle over Biotechnology*. University of Minnesota Press.

Schuurman, F. (2000) "Paradigms Lost, Paradigms regained? Development Studies in the Twenty-First Century." *Third World Quarterly* 21 (1), 7-20.

Scott, D. (1995). "Colonial Governmentality." *Social Text,* 43.

Scott, J. (1985) *Weapons of the Weak. Everyday Forms of Peasant Resistance*. Yale University Press.

Scott, J. (1998). *Seeing Like a State. How Certain Schemes to Improve the Human Condition have Failed*. Yale University Press.

Shelton, L. (2004) "Drawing Swords: War in American Editorial Cartoons." *American Journalism*, 21(2), 13-45.

Selinger, E. (2003) "Interdisciplinary Provocateurs: Philosophically Assesing Haraway and Pickering." In: *Chasing Technoscience. Matrix for Materiality*. Indiana University Press.

Serna-Saldivar, S., et al. (2001). *Food Uses of Regular and Specialty Corns and their Dry-Milled Fractions, Specialty Corns*, pp.303-338. CRC Press LLC.

Slater, C. (1996) "Amazonia as Edenic Narrative." In: *Uncommon Ground: Rethinking the Human Place in Nature*. Edited by William Cronon. Norton.

Smith, N. (1984) *Uneven Development. Nature, Capital and the Production of Space*. University of Georgia Press.

The Environmental Magazine (2011) "About E" Retrieved from: http://www.emagazine.com/about-e/. Last accessed on March 21 2011.

Toledo, V. (2001) "Una Modernidad Alternativa." *Cuadernos Agrarios*, 21. Nueva Epoca, Mexico.

Toledo, V. (2008) *La Memoria Biocultural: La Importancia Ecológica de las Sabidurías Tradicionales*. Icaria Editorial. Barcelona, España.

Tsing A. (2000) "The Global Situation." *Cultural Anthropology*. 15(3), 327-60.

Tsing, A. (2005) *Friction: An Ethnography of Global Connection.* Princeton and Oxford: Princeton University Press.

Tuchman, G. (1978) *Making News: A Study in the Construction of Reality*. New York, Free Press, London, Collier Macmillan Publishers.

Unesco (2010a) "Traditional Mexican Cuisine - Ancestral, Ongoing Community Culture, The Michoacán Paradigm." Retrieved from: http://www.unesco.org/culture/ich/index.php?lg=en&pg=00011&RL=00400. Last accessed on March 15, 2011.

Unesco (2010b) “The Gastronomic Meal of the French.” Retrieved from: http://www.unesco.org/culture/ich/index.php?lg=en&pg=00011&RL=00437. Last accessed on March 15, 2011.

Valdez, M. (2010) “Promueven Producción de Maíz Transgénico en Sacti Spiritus.” In: *Juventud Rebelde. Diario de la Juventud Cubana*. Edición Digital. Retrieved from: http://www.juventudrebelde.cu/cuba/2010-05-16/promueven-produccion-de-maiz-transgenico-en-sancti-spiritus/. Last accessed on August 12, 2011.

Via Campesina (2011) “The International Peasant Voice.” Retrieved from: http://viacampesina.org/en/index.php?option=com_content&view=category&layout=blog&id=27&Itemid=44. Last accessed on March 25, 2012.

Villalobos, V. (2008) *Los Transgenicos: Oportunidades y Amenazas*. Mundi-Prensa Editors. Mexico.

Watts, P. (2009) “The Invisible Tyranny of the Mexican Media: Tlatelolco and Beyond.” *Sincronia. A Journal for the Humanities and Social Sciences*. University of Guadalajara. Fall. Retrieved from: http://sincronia.cucsh.udg.mx/wattfall09.html. Last accessed on May 24, 2010

Weismantel, M. and S. Mintz (1999) “Sweet Interloper.” In: *The Globalization of Food.* Prospect Heights, IL: Waveland Press.

Whatmore S. (1994) “Global Agro-food Complexes and the Refashoning of Rural Europe.” In: *Globalization, Institutions and Regional Development*. Edited by: Amin A. and N.Thrift. Oxford: Oxford University Press.

Wilk, R. (1995). “Learning to be local in Belize: global systems of common difference.” In: *Worlds Apart: Modernity Through the Prism of the Local.* pp. 110-133.

Williams, R. (1977) *Marxism and Literature*. Oxford University Press.

Wise, T., et al. (eds.) (2003) *Confronting Globalization: Economic Integration and Popular Resistance in Mexico.* Bloomfield, CT: Kumarian Press.

Wise, T. (2007) “Policy Space for Mexican Maize: Protecting Agro-biodiversity by Promoting Rural Livelihoods.” *Global Development and Environment Institute Working Paper* 07-01.

Wittman, H. (2009) “Reworking the Metabolic Rift: La Via Campesina, Agrarian Citizenship, and Food Sovereignty.” The Journal of Peasant Studies. 36 (4), pp. 805-826.

Yearley, S. (2000) “Science and the Environment.” In: *The International Handbook of Environmental Sociology.* Edward Elgar Pub; 1st edition.

Zacarias Castillo, A. (1995) “El Papel del Papel de PIPSA en los Medios Mexicanos de Comunicación.” In: *Comunicación y Sociedad*, 25-27. DECS, Universidad de Guadalajara.

Zizek, S. (1989) *The Sublime Object of Ideology*. Verso.